10X Chromatin Rinse Buffer (CRB)

Section 1: Chemical Information
Product Name: Bead Wash Buffer 1
Supplier: Phase Genomics, 1617 8th Ave N, Seattle, WA 98109, 1-833-742-7436
Recommended use: Reagent

Section 2: Composition and Information on Ingredients
Hazard Classification
Health Hazards: No known OSHA hazards
Not a dangerous substance according to GHS
GHS Label Element
Hazard Symbol: N/A
Hazard Statements: Not a hazardous substance or mixture.

Section 3: Hazard Identification
Substance or Mixture: Mixture of non-hazardous substances.

Section 4: First Aid Measures
General Advice: Wear protective gloves/protective clothing/eye protection/face protection.
If Inhaled: If not breathing, give artificial respiration. Consult doctor in case of complaints.
In Case of Skin Contact: Wash with soap and water. Generally doesn’t irritate.
In Case of Eye Contact: Remove contact lenses, if present and easy to do. Continue rinsing.
If Swallowed: N/A
Most Important Symptoms and Effects, Acute and Delayed: N/A
Recommendations for Immediate Medical Attention and Special Treatment: Treat symptomatically.

Section 5: Fire and Explosion Data
Conditions of Flammability: Not flammable or combustible.
Suitable Extinguishing Media: Dry powder, CO2, water spray or regular foam.
Special Protective Equipment for Firefighters: Wear self-contained breathing apparatus, if necessary.
Hazardous Combustion Products: Further Information: N/A
Further information: N/A

Section 6: Accidental Release Measures
Personal Precautions: Not required.
Environmental Precautions: Do not allow undiluted product to enter sewer/surface or ground water.
Emergency Procedures: Evacuate personnel to safe areas and follow emergency response protocols.
Methods and Materials for Containment and Cleaning Up: Use inert absorbent material to soak up spill.
See section 7 for information on safe handling.
See section 8 for information on PPE.
See section 13 for disposal information.

Section 7: Handling and Storage
Precautions for Safe Handling: Provide appropriate exhaust ventilation at places where dust is formed. Conditions for Safe Storage: Store at 2-8°C. Keep container tightly closed in a dry, well-ventilated place.
Incompatible Products: N/A

Section 8: Exposure Controls and Personal Protection
Appropriate Engineering Controls: General industrial hygiene practice.
Recommendations for Personal Protective Measures:
Hand Protection: The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation Material of gloves: The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material cannot be calculated in advance and has therefore to be checked prior to the application.
Eye Protection: N/A
Skin and Body Protection: Wear appropriate laboratory attire when handling this product, such as gloves, long pants, closed-toe shoes and a laboratory coat.
Respiratory Protection: N/A
Hygiene Measures: Avoid contact with eyes, skin and clothing. Wash hands thoroughly after using this product.
Special Requirements for Personal Protective Equipment, Protective Clothing, Respirators, etc: N/A
Components with Workplace Control Parameters: N/A

**Section 9: Physical and Chemical Properties**

**Appearance:**
- **Form:** Liquid
- **Color:** Clear
- **Odor:** Odorless
- **Odor Threshold:** No data available
- **pH:** No data available

**Melting Point/Freezing Point:** No data available

**Initial Boiling Point/Boiling Range:** No data available

**Flash Point:** No data available

**Evaporation Rate:** No data available

**Flammability (Solid, Gas):** No data available

**Upper/Lower Limits on Flammability and Explosive Limits:**
- Flammability Limit (Upper): No data available
- Flammability Limit (Lower): No data available

**Explosive Limit (Upper):** No data available

**Explosive Limit (Lower):** No data available

**Vapor Pressure:** No data available

**Vapor Density:** No data available

**Relative Density:** No data available

**Solubility:**
- Solubility in Water: Not miscible or difficult to mix.
- Solubility (Other): No data available
- Partition Coefficient (n-octanol/ water): No data available

**Auto-Ignition Temperature:** No data available

**Decomposition Temperature:** No data available

**Viscosity:** No data available

**Section 10: Stability and Reactivity Data**

**Reactivity:** No data available

**Chemical Stability:** No data available

**Possibility of Hazardous Reactions:** Conditions to Avoid: No data available

**Materials to Avoid:** No data available

**Hazardous Decomposition Products:** No data available

**Section 11: Toxicological Information**

**Information on Likely Routes of Exposure:**
- **Inhalation:** No data available
- **Ingestion:** No data available
- **Skin:** No irritant effect.
- **Eyes:** No irritant effect.

**Information on Toxicological Effects:**

**Acute Toxicity:**
- Oral LD50: No data available
- Inhalation LC50: No data available
- Dermal LD50: No data available

**Other Information:** No data available

**Skin Corrosion/Irritation:** No data available

**Serious Eye Damage/Irritation:** No data available

**Respiratory or Skin Sensitization:** No data available

**Germ Cell Mutagenicity:** No data available

**Additional information:**

The product is not subject to classification according to internally approved calculation methods for preparations: When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

**Carcinogenicity:**
- **IARC:** No component of this product that is present at 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
- **ACGIH:** No component of this product that is present at 0.1% is identified as probable, possible or confirmed human carcinogen by ACGIH.
- **NTP:** No component of this product that is present at 0.1% is identified as probable, possible or confirmed human carcinogen by NTP.
- **OSHA:** No component of this product that is present at 0.1% is identified as probable, possible or confirmed human carcinogen by OSHA.

**Reproductive Toxicity:** No data available
Teratogenicity: No data available
Specific Target Organ Toxicity –
Single Exposure: No data available
Specific Target Organ Toxicity –
Repeated Exposures: No data available
Aspiration Hazard: No data available
Signs and Symptoms of Exposure: No data available
Synergistic Effects: No data available
Additional Information: No data available

Section 12: Ecological Information
Toxicity: No known significant effects or critical hazards.
Persistence and Degradability: No data available
Bioaccumulative Potential: No data available
Mobility in Soil: No data available
PBT and vPvB Assessment: No data available
Other Adverse Effects: N/A
General notes: Water hazard class 1 (Self-assessment): slightly hazardous for water. Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Section 13: Disposal Considerations
Recommendation: Smaller quantities can be disposed of with household waste.

Section 14: Transport Information
DOT: Not regulated.
IMDG: Not regulated.
IATA: Not regulated.

Section 15: Other Regulatory Information
SARA 302 Components
No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
SARA 313 Components
This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.
SARA 311/312 Hazards
No SARA Hazards
Massachusetts Right To Know Components: N/A
Pennsylvania Right To Know Components: N/A
New Jersey Right To Know Components: N/A
California Prop. 65 Components
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

Section 16: Other Information
References: Not available. Other Special Considerations: Not available.
Last Updated: 07/06/2018 12:00 PM

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Bead Binding Buffer

Section 1: Chemical Information
Product Name: Bead Binding Buffer
Supplier: Phase Genomics, 1617 8th Ave N, Seattle, WA 98109, 1-833-742-7436
Recommended Use: reagent

Section 2: Composition and Information on Ingredients
Health Hazards: No known OSHA hazards
Not a dangerous substance according to GHS

Section 3: Hazard Identification
Substance or Mixture: Mixture of non-hazardous substances.

Section 4: First Aid Measures
General Advice: Wear protective gloves/protective clothing/eye protection/face protection.
In Case of Skin Contact: Wash with soap and water. Generally doesn’t irritate.
In Case of Eye Contact: Remove contact lenses, if present and easy to do. Continue rinsing.
If Swallowed: N/A

Section 5: Fire and Explosion Data
Conditions of Flammability: Not flammable or combustible.
Suitable Extinguishing Media: Dry powder, CO2, water spray or regular foam.
Special Protective Equipment for Firefighters: Wear self-contained breathing apparatus, if necessary.
Hazardous Combustion Products: Further Information: N/A
Further information: N/A

Section 6: Accidental Release Measures
Personal Precautions: Not required.
Environmental Precautions: Do not allow undiluted product to enter sewer/surface or ground water.
Emergency Procedures: Evacuate personnel to safe areas and follow emergency response protocols.
Methods and Materials for Containment and Cleaning Up: Use inert absorbent material to soak up spill.
See section 7 for information on safe handling.
See section 8 for information on PPE.
See section 13 for disposal information.

Section 7: Handling and Storage
Precautions for Safe Handling: Provide appropriate exhaust ventilation at places where dust is formed. Conditions for Safe Storage: Store at 2-8°C. Keep container tightly closed in a dry, well-ventilated place.
Incompatible Products: N/A

Section 8: Exposure Controls and Personal Protection
Appropriate Engineering Controls: General industrial hygiene practice.
Recommendations for Personal Protective Measures:
Hand Protection: The glove material has to be impermeable and resistant to the product/the substance/the preparation. Due to missing tests no recommendation to the glove material can be given for the product/the preparation/the chemical mixture. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.
Material of gloves: The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material cannot be calculated in advance and has therefore to be checked prior to the application.

Eye Protection: N/A
Skin and Body Protection: Wear appropriate laboratory attire when handling this product, such as gloves, long pants, closed-toe shoes and a laboratory coat.
Respiratory Protection: N/A
Hygiene Measures: Avoid contact with eyes, skin and clothing. Wash hands thoroughly after using this product.
Special Requirements for Personal Protective Equipment, Protective Clothing, Respirators, etc: N/A
Components with Workplace Control Parameters: N/A
Section 9: Physical and Chemical Properties

Appearance:
- Form: Liquid
- Color: Clear
- Odor: Odorless
- Odor Threshold: No data available
- pH: No data available

Melting Point/Freezing Point: No data available
Initial Boiling Point/Boiling Range: No data available
Flash Point: No data available
Evaporation Rate: No data available

Flammability (Solid, Gas):
- Upper/Lower Limits on Flammability and Explosive Limits:
  - Flammability Limit (Upper): No data available
  - Flammability Limit (Lower): No data available
  - Explosive Limit (Upper): No data available
  - Explosive Limit (Lower): No data available

Vapor Pressure: No data available
Vapor Density: No data available
Relative Density: No data available

Solubility:
- Solubility in Water: Not miscible or difficult to mix.
- Solubility (Other): No data available
- Partition Coefficient (n-octanol/water): No data available

Auto-Ignition Temperature: No data available
Decomposition Temperature: No data available
Viscosity: No data available

Section 10: Stability and Reactivity Data

Reactivity: No data available
Chemical Stability: No data available
Possibility of Hazardous Reactions: Conditions to Avoid: No data available
Materials to Avoid: No data available
Hazardous Decomposition Products: No data available

Section 11: Toxicological Information

Information on Likely Routes of Exposure:
- Inhalation: No data available
- Ingestion: No data available
- Skin: No irritant effect.
- Eyes: No irritant effect.

Information on Toxicological Effects:

Acute Toxicity:
- Oral LD50: No data available
- Inhalation LC50: No data available
- Dermal LD50: No data available

Other Information: No data available
Skin Corrosion/Irritation: No data available
Serious Eye Damage/Irritation: No data available
Respiratory or Skin Sensitization: No data available
Germ Cell Mutagenicity: No data available

Additional information:
The product is not subject to classification according to internally approved calculation methods for preparations: When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

Carcinogenicity:
- IARC: No component of this product that is present at 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
- ACGIH: No component of this product that is present at 0.1% is identified as probable, possible or confirmed human carcinogen by ACGIH.
- NTP: No component of this product that is present at 0.1% is identified as probable, possible or confirmed human carcinogen by NTP.
- OSHA: No component of this product that is present at 0.1% is identified as probable, possible or confirmed human carcinogen by OSHA.

Reproductive Toxicity: No data available
Teratogenicity: No data available
Specific Target Organ Toxicity –
Single Exposure: No data available
Specific Target Organ Toxicity –
Repeated Exposures: No data available
Aspiration Hazard: No data available
Signs and Symptoms of Exposure: No data available
Synergistic Effects: No data available
Additional Information: No data available

Section 12: Ecological Information
Toxicity: No known significant effects or critical hazards.
Persistence and Degradability: No data available
Bioaccumulative Potential: No data available
Mobility in Soil: No data available
PBT and vPvB Assessment: No data available
Other Adverse Effects: N/A
General notes: Water hazard class 1 (Self-assessment): slightly hazardous for water. Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Section 13: Disposal Considerations
Recommendation: Smaller quantities can be disposed of with household waste.

Section 14: Transport Information
DOT: Not regulated.
IMDG: Not regulated.
IATA: Not regulated.

Section 15: Other Regulatory Information
SARA 302 Components
No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components
This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards
No SARA Hazards

Massachusetts Right To Know Components: N/A
Pennsylvania Right To Know Components: N/A
New Jersey Right To Know Components: N/A
California Prop. 65 Components
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

Section 16: Other Information
References: Not available. Other Special Considerations: Not available.
Last Updated: 07/06/2018 12:00 PM

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SAFETY DATA SHEET: Proximo Hi-C (Microbe) Kit

Bead Wash Buffer 1

Section 1: Chemical Information
Product Name: Bead Wash Buffer 1
Supplier: Phase Genomics, 1617 8th Ave N, Seattle, WA 98109, 1-833-742-7436
Recommended use: Reagent

Section 2: Composition and Information on Ingredients
Hazard Classification
Health Hazards: No known OSHA hazards
Not a dangerous substance according to GHS
GHS Label Element
Hazard Symbol: N/A
Hazard Statements: Not a hazardous substance or mixture.

Section 3: Hazard Identification
Substance or Mixture: Mixture of non-hazardous substances.

Section 4: First Aid Measures
General Advice: Wear protective gloves/protective clothing/eye protection/face protection.
If Inhaled: If not breathing, give artificial respiration. Consult doctor in case of complaints.
In Case of Skin Contact: Wash with soap and water. Generally doesn’t irritate.
In Case of Eye Contact: Remove contact lenses, if present and easy to do. Continue rinsing.
If Swallowed: N/A
Most Important Symptoms and Effects, Acute and Delayed: N/A
Recommendations for Immediate Medical Attention and Special Treatment: Treat symptomatically.

Section 5: Fire and Explosion Data
Conditions of Flammability: Not flammable or combustible.
Suitable Extinguishing Media: Dry powder, CO2, water spray or regular foam.
Special Protective Equipment for Firefighters: Wear self-contained breathing apparatus, if necessary.
Hazardous Combustion Products: Further Information: N/A
Further information: N/A

Section 6: Accidental Release Measures
Personal Precautions: Not required.
Environmental Precautions: Do not allow undiluted product to enter sewer/surface or ground water.
Emergency Procedures: Evacuate personnel to safe areas and follow emergency response protocols.
Methods and Materials for Containment and Cleaning Up:
Use inert absorbent material to soak up spill.
See section 7 for information on safe handling.
See section 8 for information on PPE.
See section 13 for disposal information.

Section 7: Handling and Storage
Precautions for Safe Handling: Provide appropriate exhaust ventilation at places where dust is formed. Conditions for Safe Storage: Store at 2-8°C. Keep container tightly closed in a dry, well-ventilated place.
Incompatible Products: N/A

Section 8: Exposure Controls and Personal Protection
Appropriate Engineering Controls: General industrial hygiene practice.
Recommendations for Personal Protective Measures:
Hand Protection: The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
Material of gloves: The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material cannot be calculated in advance and has therefore to be checked prior to the application.
Eye Protection: N/A
Skin and Body Protection: Wear appropriate laboratory attire when handling this product, such as gloves, long pants, closed-toe shoes and a laboratory coat.
Respiratory Protection: N/A
Hygiene Measures: Avoid contact with eyes, skin and clothing. Wash hands thoroughly after using this product.
Special Requirements for Personal Protective Equipment, Protective Clothing, Respirators, etc: N/A
Components with Workplace Control Parameters: N/A
Section 9: Physical and Chemical Properties

Appearance:
- Form: Liquid
- Color: Clear
- Odor: Odorless
- Odor Threshold: No data available
- pH: No data available

Melting Point/Freezing Point: No data available
Initial Boiling Point/Boiling Range: No data available
Flash Point: No data available
Evaporation Rate: No data available

Flammability (Solid, Gas):
- Upper/Lower Limits on Flammability and Explosive Limits:
  - Flammability Limit (Upper): No data available
  - Flammability Limit (Lower): No data available
- Explosive Limit (Upper): No data available
- Explosive Limit (Lower): No data available

Vapor Pressure: No data available
Vapor Density: No data available
Relative Density: No data available

Solubility:
- Solubility in Water: Not miscible or difficult to mix.
- Solubility (Other): No data available
- Partition Coefficient (n-octanol/ water): No data available

Auto-Ignition Temperature: No data available
Decomposition Temperature: No data available
Viscosity: No data available

Section 10: Stability and Reactivity Data

Reactivity: No data available
Chemical Stability: No data available
Possibility of Hazardous Reactions: Conditions to Avoid: No data available
Materials to Avoid: No data available
Hazardous Decomposition Products: No data available

Section 11: Toxicological Information

Information on Likely Routes of Exposure:
- Inhalation: No data available
- Ingestion: No data available
- Skin: No irritant effect.
- Eyes: No irritant effect.

Information on Toxicological Effects:

Acute Toxicity:
- Oral LD50: No data available
- Inhalation LC50: No data available
- Dermal LD50: No data available

Other Information: No data available

Skin Corrosion/Irritation: No data available
Serious Eye Damage/Irritation: No data available
Respiratory or Skin Sensitization: No data available
Germ Cell Mutagenicity: No data available

Additional information:

The product is not subject to classification according to internally approved calculation methods for preparations: When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

Carcinogenicity:
- IARC: No component of this product that is present at 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
- ACGIH: No component of this product that is present at 0.1% is identified as probable, possible or confirmed human carcinogen by ACGIH.
- NTP: No component of this product that is present at 0.1% is identified as probable, possible or confirmed human carcinogen by NTP.
- OSHA: No component of this product that is present at 0.1% is identified as probable, possible or confirmed human carcinogen by OSHA.

Reproductive Toxicity: No data available
Teratogenicity: No data available
SAFETY DATA SHEET: Proximo Hi-C (Microbe) Kit

Specific Target Organ Toxicity –
Single Exposure: No data available
Specific Target Organ Toxicity –
Repeated Exposures: No data available
Aspiration Hazard: No data available
Signs and Symptoms of Exposure: No data available
Synergistic Effects: No data available
Additional Information: No data available

Section 12: Ecological Information
Toxicity: No known significant effects or critical hazards.
Persistence and Degradability: No data available
Bioaccumulative Potential: No data available
Mobility in Soil: No data available
PBT and vPvB Assessment: No data available
Other Adverse Effects: N/A
General notes: Water hazard class 1 (Self-assessment): slightly hazardous for water. Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Section 13: Disposal Considerations
Recommendation: Smaller quantities can be disposed of with household waste.

Section 14: Transport Information
DOT: Not regulated.
IMDG: Not regulated.
IATA: Not regulated.

Section 15: Other Regulatory Information
SARA 302 Components
No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
SARA 313 Components
This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.
SARA 311/312 Hazards
No SARA Hazards
Massachusetts Right To Know Components: N/A
Pennsylvania Right To Know Components: N/A
New Jersey Right To Know Components: N/A
California Prop. 65 Components
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

Section 16: Other Information
References: Not available. Other Special Considerations: Not available.
Last Updated: 07/06/2018 12:00 PM
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SAFETY DATA SHEET: Proximo Hi-C (Microbe) Kit

Bead Wash Buffer 2

Section 1: Chemical Information
Product Name: Bead Wash Buffer 2
Supplier: Phase Genomics, 1617 8th Ave N, Seattle, WA 98109, 1-833-742-7436
Recommended Use: reagent

Section 2: Composition and Information on Ingredients
Hazard Classification
Health Hazards: No known OSHA hazards
GHS Label Element
Hazard Symbol: N/A
Hazard Statements: Not a hazardous substance or mixture.

Section 3: Hazard Identification
Substance or Mixture: Mixture of non-hazardous substances.

Section 4: First Aid Measures
General Advice: Wear protective gloves/protective clothing/eye protection/face protection.
If Inhaled: If not breathing, give artificial respiration. Consult doctor in case of complaints.
In Case of Skin Contact: Wash with soap and water. Generally doesn’t irritate.
In Case of Eye Contact: Remove contact lenses, if present and easy to do. Continue rinsing.
If Swallowed: N/A
Most Important Symptoms and Effects, Acute and Delayed: N/A
Recommendations for Immediate Medical Attention and Special Treatment: Treat symptomatically.

Section 5: Fire and Explosion Data
Conditions of Flammability: Not flammable or combustible.
Suitable Extinguishing Media: Dry powder, CO2, water spray or regular foam.
Special Protective Equipment for Firefighters: Wear self-contained breathing apparatus, if necessary.
Hazardous Combustion Products: Further Information: N/A
Further Information: N/A

Section 6: Accidental Release Measures
Personal Precautions: Not required.
Environmental Precautions: Do not allow undiluted product to enter sewer/surface or ground water.
Emergency Procedures: Evacuate personnel to safe areas and follow emergency response protocols.
Methods and Materials for Containment and Cleaning Up: Use inert absorbent material to soak up spill.
See section 7 for information on safe handling.
See section 8 for information on PPE.
See section 13 for disposal information.

Section 7: Handling and Storage
Precautions for Safe Handling: Provide appropriate exhaust ventilation at places where dust is formed. Conditions for Safe Storage: Store at 2-8°C. Keep container tightly closed in a dry, well-ventilated place.
Incompatible Products: N/A

Section 8: Exposure Controls and Personal Protection
Appropriate Engineering Controls: General industrial hygiene practice.
Recommendations for Personal Protective Measures:
Hand Protection: The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
Material of gloves: The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material cannot be calculated in advance and has therefore to be checked prior to the application.
Eye Protection: N/A
Skin and Body Protection: Wear appropriate laboratory attire when handling this product, such as gloves, long pants, closed-toe shoes and a laboratory coat.
Respiratory Protection: N/A
Hygiene Measures: Avoid contact with eyes, skin and clothing. Wash hands thoroughly after using this product.
Special Requirements for Personal Protective Equipment, Protective Clothing, Respirators, etc: N/A
Components with Workplace Control Parameters: N/A
Section 9: Physical and Chemical Properties

Appearance:
- Form: Liquid
- Color: Clear
- Odor: Odorless
- Odor Threshold: No data available
- pH: No data available

Melting Point/Freezing Point: No data available
Initial Boiling Point/Boiling Range: No data available
Flash Point: No data available
Evaporation Rate: No data available

Flammability (Solid, Gas): No data available
- Upper/Lower Limits on Flammability and Explosive Limits:
  - Flammability Limit (Upper): No data available
  - Flammability Limit (Lower): No data available

Explosive Limit (Upper): No data available
Explosive Limit (Lower): No data available

Vapor Pressure: No data available
Vapor Density: No data available
Relative Density: No data available

Solubility:
- Solubility in Water: Not miscible or difficult to mix.
- Solubility (Other): No data available
- Partition Coefficient (n-octanol/water): No data available

Auto-Ignition Temperature: No data available
Decomposition Temperature: No data available
Viscosity: No data available

Section 10: Stability and Reactivity Data

Reactivity: No data available
Chemical Stability: No data available
Possibility of Hazardous Reactions: Conditions to Avoid: No data available
Materials to Avoid: No data available
Hazardous Decomposition Products: No data available

Section 11: Toxicological Information

Information on Likely Routes of Exposure:
- Inhalation: No data available
- Ingestion: No data available
- Skin: No irritant effect.
- Eyes: No irritant effect.

Information on Toxicological Effects:
- Acute Toxicity:
  - Oral LD50: No data available
  - Inhalation LC50: No data available
  - Dermal LD50: No data available

Other Information: No data available
Skin Corrosion/Irritation: No data available
Serious Eye Damage/Irritation: No data available
Respiratory or Skin Sensitization: No data available
Germ Cell Mutagenicity: No data available

Additional information:
The product is not subject to classification according to internally approved calculation methods for preparations: When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

Carcinogenicity:
- IARC: No component of this product that is present at 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
- ACGIH: No component of this product that is present at 0.1% is identified as probable, possible or confirmed human carcinogen by ACGIH.
- NTP: No component of this product that is present at 0.1% is identified as probable, possible or confirmed human carcinogen by NTP.
- OSHA: No component of this product that is present at 0.1% is identified as probable, possible or confirmed human carcinogen by OSHA.

Reproductive Toxicity: No data available
Teratogenicity: No data available
Specific Target Organ Toxicity –
Single Exposure: No data available
Specific Target Organ Toxicity –
Repeated Exposures: No data available
Aspiration Hazard: No data available
Signs and Symptoms of Exposure: No data available
Synergistic Effects: No data available
Additional Information: No data available

Section 12: Ecological Information
Toxicity: No known significant effects or critical hazards.
Persistence and Degradability: No data available
Bioaccumulative Potential: No data available
Mobility in Soil: No data available
PBT and vPvB Assessment: No data available
Other Adverse Effects: N/A
General notes: Water hazard class 1 (Self-assessment): slightly hazardous for water. Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Section 13: Disposal Considerations
Recommendation: Smaller quantities can be disposed of with household waste.

Section 14: Transport Information
DOT: Not regulated.
IMDG: Not regulated.
IATA: Not regulated.

Section 15: Other Regulatory Information
SARA 302 Components
No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components
This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards
No SARA Hazards
Massachusetts Right To Know Components: N/A
Pennsylvania Right To Know Components: N/A
New Jersey Right To Know Components: N/A
California Prop. 65 Components
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

Section 16: Other Information
References: Not available. Other Special Considerations: Not available.
Last Updated: 07/06/2018 12:00 PM
The information in this SDS is provided in good faith based on our knowledge as of the issue date (or subsequent revision date, if any), and is to be used only as a guide. This SDS does not constitute a guarantee (express or implied) of any kind and we make no warranties or merchantability or fitness for a particular purpose. This information relates only to the designated product as shipped and may not be valid if the product is used in combination with any other materials or is not used in accordance with our instructions. It is the responsibility of the buyer/user to ensure that its activities comply with all applicable governmental requirements. Since conditions of use of the product are not under the control of Phase Genomics, it is the duty of the buyer/user to determine the necessary conditions for the safe use of the product. Phase Genomics will not be liable for any damages resulting from handling or contact with the product.
Crosslinking Solution

Section 1: Chemical Information
Product Name: Crosslinking Solution
RTECS: LP8925000
TSCA: TSCA 8(b) inventory: Formaldehyde; Water
Cl#: Not applicable.
Synonym: Formalin
Chemical Name: Formaldehyde
Chemical Formula: HCHO
Supplier: Phase Genomics, 1617 8th Ave N, Seattle, WA 98109, 1-833-742-7436
Recommended use: reagent

Section 2: Composition and Information on Ingredients
Composition:
1% Formaldehyde, CAS# 50-00-0
99% Water, CAS#7732-18-5

Toxicological Data on Ingredients:
Formaldehyde: ORAL (LD50): Acute: 100 mg/kg [Rat]. 42 mg/kg [Mouse]. 260 mg/kg [Guinea pig]. MIST (LC50): Acute: 454000 mg/m 4 hours [Mouse].

Section 3: Hazard Identification
Potential Acute Health Effects:
Very hazardous in case of eye contact (irritant), of ingestion. Hazardous in case of skin contact (irritant, sensitizer, permeator), of eye contact (corrosive). Slightly hazardous in case of skin contact (corrosive). Severe over-exposure can result in death. Inflammation of the eye is characterized by redness, watering, and itching.

Potential Chronic Health Effects:
Hazardous in case of skin contact (sensitizer). CARCINOGENIC EFFECTS: Classified A2 (Suspected for human.) by ACGIH, 2A (Probable for human.) by IARC [Formaldehyde]. MUTAGENIC EFFECTS: Mutagenic for mammalian somatic cells. [Formaldehyde]. Mutagenic for bacteria and/or yeast. [Formaldehyde]. Mutagenic alcohol]. TERATOGENIC EFFECTS: Classified POSSIBLE for human [Methyl alcohol]. DEVELOPMENTAL TOXICITY: Not available The substance may be toxic to kidneys, liver, skin, central nervous system (CNS). Repeated or prolonged exposure to the substance can produce target organs damage. Repeated exposure to a highly toxic material may produce general deterioration of health by an accumulation in one or many human organs.

Section 4: First Aid Measures
Eye Contact:
Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Cold water may be used. Get medical attention immediately.

Skin Contact:
In case of contact, immediately flush skin with plenty of water. Cover the irritated skin with an emollient. Remove contaminated clothing and shoes. Cold water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.

Serious Skin Contact:
Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek immediate medical attention.

Inhalation:
If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

Serious Inhalation:
Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. WARNING: It may be hazardous to the person providing aid to give mouth-to-mouth resuscitation when the inhaled material is toxic, infectious or corrosive. Seek immediate medical attention.

Ingestion:
If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.

Serious Ingestion:
Not available.

Section 5: Fire and Explosion Data
Flammability of the Product:
Flammable. Auto-Ignition Temperature: 430°C (806°F) Flash Points: CLOSED CUP: 50°C (122°F). OPEN CUP: 60°C (140°F). Flammable Limits: The greatest known range is LOWER: 6% UPPER: 36.5% (Methyl alcohol) Products of Combustion: These products are carbon oxides (CO, CO2).

Fire Hazards in Presence of Various Substances:

Explosion Hazards in Presence of Various Substances: Non-explosive in presence of open flames and sparks, of shocks.

Fire Fighting Media and Instructions:
Flammable liquid, soluble or dispersed in water. SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use alcohol foam, water spray or fog. Cool containing vessels with water jet in order to prevent pressure build-up, autoignition or explosion.

Special Remarks on Fire Hazards:
Explosive in the form of vapor when exposed to heat or flame. Vapor may travel considerable distance to source of ignition and flash back. When heated to decomposition, it emits acid smoke and irritating fumes. **CAUTION:** MAY BURN WITH NEAR INVISIBLE FLAME (Methyl alcohol)

### Special Remarks on Explosion Hazards:

Reaction with peroxide, nitrogen dioxide, and permformic acid can cause an explosion. (Formaldehyde gas)

### Section 6: Accidental Release Measures

#### Small Spill:
Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container. If necessary: Neutralize the residue with a dilute solution of sodium carbonate.

#### Large Spill:
Flammable liquid. Poisonous liquid. Keep away from heat. Keep away from sources of ignition. Stop leak if without risk. Absorb with DRY earth, sand or other non-combustible material. Do not get water inside container. Do not touch spilled material. Use water spray to reduce vapors. Prevent entry into sewers, basements or confined areas; dike if needed. Call for assistance on disposal. Neutralize the residue with a dilute solution of sodium carbonate. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

### Section 7: Handling and Storage

#### Precautions:
Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not ingest. Do not breathe gas/fumes/vapor/spray. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes. Keep away from incompatibles such as oxidizing agents, reducing agents, acids, alkalis, moisture.

#### Storage:
Store in a segregated and approved area. Keep container in a cool, well-ventilated area. Keep container tightly closed and sealed until ready for use. Avoid all possible sources of ignition (spark or flame).

### Section 8: Exposure Controls and Personal Protection

#### Engineering Controls:
Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.

#### Personal Protection:
Safety glasses. Lab coat. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Gloves (impervious).

#### Personal Protection in Case of a Large Spill:
Splash goggles. Full suit. Vapor respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

#### Exposure Limits:
- **Formaldehyde gas**
  - STEL: 0.3 (ppm) from ACGIH (TLV) [United States]
  - STEL: 0.37 (mg/m3) from ACGIH (TLV) [United States]
  - TWA: 0.75 STEL: 2 (ppm) from OSHA (PEL) [United States]
  - TWA: 2 STEL: 2 (ppm) [United Kingdom (UK)]
  - TWA: 2.5 STEL: 2.5 (mg/m3) [United Kingdom (UK)]
  - Methyl alcohol
  - TWA: 200 STEL: 250 (ppm) from OSHA (PEL) [United States]
  - TWA: 200 STEL: 250 (ppm) from ACGIH (TLV) [United States] [1999]
  - STEL: 250 (ppm) [Canada]
  - Consult local authorities for acceptable exposure limits.

### Section 9: Physical and Chemical Properties

#### Physical state and appearance:
Liquid.

#### Odor:
Pungent. Suffocating. (Strong.)

#### Taste:
Not available.

#### Molecular Weight:
30.02

#### Color:
Clear Colorless.

#### pH (1% soln/water):
3 [Acidic.]

#### Boiling Point:
98°C (208.4°F)

#### Melting Point:
-15°C (5°F)

#### Critical Temperature:
The lowest known value is 240°C (464°F) (Methyl alcohol).

#### Specific Gravity:
1.08 (Water = 1)

#### Vapor Pressure:
2.4 kPa (@ 20°C)

#### Vapor Density:
1.03 (Air = 1)

#### Volatility:
100% (w/w).

#### Odor Threshold:
The highest known value is 100 ppm (Methyl alcohol)

#### Water/Oil Dist. Coeff.:
Not available.

#### Ionicity (in Water):
Non-ionic.

#### Dispersion Properties:
See solubility in water, diethyl ether, acetone.

#### Solubility:
- Easily soluble in cold water, hot water. Soluble in diethyl ether, acetone, alcohol

### Section 10: Stability and Reactivity Data

#### Stability:
The product is stable.

#### Instability Temperature:
Not available.

#### Conditions of Instability:
Heat, ignition sources (flames, sparks), incompatible materials
SAFETY DATA SHEET: Proximo Hi-C (Microbe) Kit

**Section 11: Toxicological Information**

**Routes of Entry:** Absorbed through skin. Dermal contact. Eye contact. Inhalation.

**Toxicity to Animals:**
- Acute oral toxicity (LD50): 42 mg/kg [Mouse]. Formaldehyde: Acute dermal toxicity (LD50): 15800 mg/kg [Rabbit]. Methyl alcohol. Acute toxicity of the mist (LC50): 454000 mg/m 4 hours [Mouse]. Formaldehyde: 3

**Chronic Effects on Humans:**

**Other Toxic Effects on Humans:**
- Very hazardous in case of ingestion. Hazardous in case of skin contact (irritant, sensitizer, permeator), of eye contact (corrosive), of inhalation (lung corrosive). Slightly hazardous in case of skin contact (corrosive).

**Special Remarks on Toxicity to Animals:**
- Formaldehyde: LD50 [Rabbit] - Route: Skin; Dose: 270 ul/kg

**Special Remarks on Chronic Effects on Humans:**
- Exposure to Formaldehyde and Methanol may affect genetic material (mutagenic). Exposure to Formaldehyde and Methanol may cause adverse reproductive effects and birth defects (teratogenic). Adverse reproductive effects of Formaldehyde as well as Methanol are primarily based on animal studies. Very few human studies have been done on the adverse reproductive effects from exposure to Formaldehyde. Studies produced a weak association (limited evidence) between adverse human female reproductive effects and occupational exposure. Furthermore, no human data could be found on adverse reproductive effects from occupational exposure to Methanol. Exposure to Formaldehyde may cause cancer.

**Special Remarks on other Toxic Effects on Humans:**
- Acute Potential Health Effects: Skin: Corrosive. Causes skin irritation which may range from mild to severe with possible burns depending on the extent of exposure and concentration of solution. Other symptoms may include brownish discoloration of the skin, urticaria, and papulovesicular eruptions. May be absorbed through skin with symptoms paralleling those of ingestion. Eyes: Corrosive. Contact with liquid causes severe eye irritation and burns. It may cause irreversible eye damage (severe corneal Solutions containing low formaldehyde concentrations may produce transient discomfort and irritation. Inhalation: Causes irritation of the respiratory tract (nose, throat, airways). Symptoms may include dry and sore mouth and throat, thirst, and sleep disturbances, difficulty breathing, shortness of breath, coughing, sneezing, wheezing rhinitis, chest tightness, pulmonary edema, bronchitis, tracheitis, laryngospasm, pneumonia, palpitations. It may also affect metabolism weight loss, metabolic acidosis), behavior/central nervous system (excitement, central nervous system depression, somnolence, convulsions, stupor, aggression, headache, weakness, dizziness, drowsiness, coma), peripheral nervous system, and blood. Ingestion: Harmful if swallowed. May be fatal. Causes gastrointestinal irritation with nausea, vomiting (possibly with blood), diarrhea, severe pain in mouth, throat and stomach, and possible corrosive injury to the gastrointestinal mucosa/ulceration or bleeding from stomach. May also affect the liver/pancreas), urinary system/kidneys (difficulty urinating, albuminuria, hematuria, anuria), blood, endocrine system, respiration (respiratory obstruction, pulmonary edema, bronchiolar obstruction), cardiovascular system (hypotension), metabolism (metabolic acidosis), eyes (retinal changes, visual field changes), and behavior/central nervous system (symptoms similar to those for inhalation). Contains Methanol which may cause blindness if swallowed. Chronic Potential Health Effects: Skin: Prolonged or repeated exposure may cause contact dermatitis both irritant and allergic. It may also cause skin discoloration. Inhalation: Although there is no clear evidence, prolonged or repeated exposure may begin to alter some of the effects of acute exposure. Other effects are similar to that of acute exposure. Ingestion: Prolonged or repeated ingestion may cause gastrointestinal tract irritation and ulceration or bleeding from the stomach. Other effects may be similar to that of acute ingestion.

**Section 12: Ecological Information**

**Ecotoxicity:** Not available. BODS and COD: Not available.

**Products of Biodegradation:**
- Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise. **Toxicity of the Products of Biodegradation:** The products of degradation are less toxic than the product itself.

**Special Remarks on the Products of Biodegradation:**
- Methanol in water is rapidly biodegraded and volatilized. Aquatic hydrolysis, oxidation, photolysis, adsorption to sediment, and bioconcentration are not significant fate processes. The half-life of methanol in surface water ranges from 24 hrs. to 168 hrs. Based on its vapor pressure, methanol exists almost entirely in the vapor phase in the ambient atmosphere. It is degraded by reaction with photochemically produced hydroxyl radicals and has an estimated half-life of 178 days. Methanol is physically removed from air by rain due to its solubility. Methanol can react with NO2 in polluted to form methyl nitrate. The half-life of methanol in air ranges from 71 hrs. (3 days) to 713 hrs. (29.7 days) based on photooxidation half-life in air. (Methyl alcohol)

**Section 13: Disposal Considerations**

**Waste Disposal:**
- Waste must be disposed of in accordance with federal, state and local environmental control regulations.

**Section 14: Transport Information**

Page 15 of 69 1-833-PHAS-GEN support@phasegenomics.com
DOT Classification:
CLASS 3: Flammable liquid. Class 8: Corrosive material

Identification:
Formaldehyde Solution, flammable (Methyl alcohol) UNNA: 1198 PG: III

Special Provisions for Transport: Not available.

Section 15: Other Regulatory Information

Federal and State Regulations:
California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer, birth defects or other reproductive harm, which would require a warning under the statute: Formaldehyde California prop. 65 (no significant risk level): Formaldehyde: 0.04 mg/day (inhalation) California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer which would require a warning under the statute: Formaldehyde Solution Connecticut hazardous material survey.: Formaldehyde; Methyl alcohol Illinois toxic substances disclosure to employee act: Formaldehyde; Methyl alcohol Illinois chemical safety act: Formaldehyde; Methyl alcohol New York release reporting list: Formaldehyde; Methyl alcohol Rhode Island RTK hazardous substances: Formaldehyde; Methyl alcohol Pennsylvania RTK: Formaldehyde; Methyl alcohol Minnesota: Formaldehyde gas; Methyl alcohol Massachusetts RTK: Formaldehyde; Methyl alcohol Massachusetts spill list: Formaldehyde; Methyl alcohol New Jersey: Formaldehyde; Methyl alcohol New Jersey spill list: Formaldehyde; Methyl alcohol Louisiana RTK reporting list: Formaldehyde; Methyl alcohol California Director’s List of Hazardous Substances: Formaldehyde; Methyl alcohol TSCA 8(b) inventory: Formaldehyde gas; Methyl alcohol; Water TSCA 4(f) priority risk review: Formaldehyde, Reagent, ACS SARA 302/304/311/312 extremely hazardous substances: Formaldehyde SARA 313 toxic chemical notification and release reporting: Formaldehyde; Methyl alcohol CERCLA: Hazardous substances.: Formaldehyde: 100 lbs. (45.36 kg); Methyl alcohol: 5000 lbs. (2268 kg);

Other Regulations:

Other Classifications:
WHMIS (Canada):
CLASS B-3: Combustible liquid with a flash point between 37.8°C (100°F) and 93.3°C (200°F). CLASS D-1A: Material causing immediate and serious toxic effects (VERY TOXIC). CLASS D-2A: Material causing other toxic effects (VERY TOXIC).

DSCL (EEC): HMIS (U.S.A.):
Health Hazard: 3 Fire Hazard: 2 Reactivity: 0 Personal Protection: G
National Fire Protection Association (U.S.A.): Health: 3 Flammability: 2 Reactivity: 0 Specific hazard:

Protective Equipment:
Gloves (impervious). Lab coat. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate. Safety glasses.

Section 16: Other Information

References: Not available. Other Special Considerations: Not available.

Last Updated: 07/06/2018 12:00 PM
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Elution Buffer

Section 1: Chemical Information
Product Name: DNA Elution Buffer
Supplier: Phase Genomics, 1617 8th Ave N, Seattle, WA 98109, 1-833-742-7436
Recommended Use: reagent

Section 2: Composition and Information on Ingredients
Hazard Classification
Health Hazards: No known OSHA hazards
GHS Label Element
Hazard Symbol: N/A
Hazard Statements: Not a hazardous substance or mixture.

Section 3: Hazard Identification
Substance or Mixture: Mixture of non-hazardous substances.

Section 4: First Aid Measures
General Advice: Wear protective gloves/protective clothing/eye protection/face protection.
If Inhaled: If not breathing, give artificial respiration. Consult doctor in case of complaints.
In Case of Skin Contact: Wash with soap and water. Generally doesn’t irritate.
If Swallowed: N/A
Most Important Symptoms and Effects, Acute and Delayed: N/A
Recommendations for Immediate Medical Attention and Special Treatment: Treat symptomatically.

Section 5: Fire and Explosion Data
Conditions of Flammability: Not flammable or combustible.
Special Extinguishing Media: Dry powder, CO2, water spray or regular foam.
Special Protective Equipment for Firefighters: Wear self-contained breathing apparatus, if necessary.
Hazardous Combustion Products: N/A
Further Information: N/A

Section 6: Accidental Release Measures
Personal Precautions: Not required.
Environmental Precautions: Do not allow undiluted product to enter sewer/surface or ground water.
Emergency Procedures: Evacuate personnel to safe areas and follow emergency response protocols.
Methods and Materials for Containment and Cleaning Up: Use inert absorbent material to soak up spill.
See section 7 for information on safe handling.
See section 8 for information on PPE.
See section 13 for disposal information.

Section 7: Handling and Storage
Precautions for Safe Handling: Provide appropriate exhaust ventilation at places where dust is formed.
Conditions for Safe Storage: Store at 2-8°C. Keep container tightly closed in a dry, well-ventilated place.
Incompatible Products: N/A

Section 8: Exposure Controls and Personal Protection
Appropriate Engineering Controls: General industrial hygiene practice.
Recommendations for Personal Protective Measures:
Hand Protection: The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
Material of gloves: The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material cannot be calculated in advance and has therefore to be checked prior to the application.
Eye Protection: N/A
Skin and Body Protection: Wear appropriate laboratory attire when handling this product, such as gloves, long pants, closed-toe shoes and a laboratory coat.
Respiratory Protection: N/A
Hygiene Measures: Avoid contact with eyes, skin and clothing. Wash hands thoroughly after using this product.
Special Requirements for Personal Protective Equipment, Protective Clothing, Respirators, etc: N/A
Components with Workplace Control Parameters: N/A

Section 9: Physical and Chemical Properties

Appearance:
- Form: Liquid
- Color: Clear
- Odor: Odorless
- Odor Threshold: No data available
- pH: No data available
- Melting Point/Freezing Point: No data available
- Initial Boiling Point/Boiling Range: No data available
- Flash Point: No data available
- Evaporation Rate: No data available
- Flammability (Solid, Gas): No data available
- Upper/Lower Limits on Flammability and Explosive Limits:
  - Flammability Limit (Upper): No data available
  - Flammability Limit (Lower): No data available
  - Explosive Limit (Upper): No data available
  - Explosive Limit (Lower): No data available
- Vapor Pressure: No data available
- Vapor Density: No data available
- Relative Density: No data available
- Solubility: Solubility in Water: Not miscible or difficult to mix.
- Solubility (Other): No data available
- Partition Coefficient (n-octanol/water): No data available
- Auto-Ignition Temperature: No data available
- Decomposition Temperature: No data available
- Viscosity: No data available

Section 10: Stability and Reactivity Data

Reactivity: No data available
- Chemical Stability: No data available
- Possibility of Hazardous Reactions: Conditions to Avoid: No data available
- Materials to Avoid: No data available
- Hazardous Decomposition Products: No data available

Section 11: Toxicological Information

Information on Likely Routes of Exposure:
- Inhalation: No data available
- Ingestion: No data available
- Skin: No irritant effect.
- Eyes: No irritant effect.

Information on Toxicological Effects:
- Acute Toxicity: Oral LD50: No data available
- Inhalation LC50: No data available
- Dermal LD50: No data available
- Other Information: No data available
- Skin Corrosion/Irritation: No data available
- Serious Eye Damage/Irritation: No data available
- Respiratory or Skin Sensitization: No data available
- Germ Cell Mutagenicity: No data available

Additional information:
The product is not subject to classification according to internally approved calculation methods for preparations: When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

Carcinogenicity:
- IARC: No component of this product that is present at 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
- ACGIH: No component of this product that is present at 0.1% is identified as probable, possible or confirmed human carcinogen by ACGIH.
- NTP: No component of this product that is present at 0.1% is identified as probable, possible or confirmed human carcinogen by NTP.
- OSHA: No component of this product that is present at 0.1% is identified as probable, possible or confirmed human carcinogen by OSHA.
Reproductive Toxicity: No data available
Teratogenicity: No data available
Specific Target Organ Toxicity –
Single Exposure: No data available
Specific Target Organ Toxicity –
Repeated Exposures: No data available
Aspiration Hazard: No data available
Signs and Symptoms of Exposure: No data available
Synergistic Effects: No data available
Additional Information: No data available

Section 12: Ecological Information
Toxicity: No known significant effects or critical hazards.
Persistence and Degradability: No data available
Bioaccumulative Potential: No data available
Mobility in Soil: No data available
PBT and vPvB Assessment: No data available
Other Adverse Effects: N/A
General notes: Water hazard class 1 (Self-assessment): slightly hazardous for water. Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Section 13: Disposal Considerations
Recommendation: Smaller quantities can be disposed of with household waste.

Section 14: Transport Information
DOT: Not regulated.
IMDG: Not regulated.
IATA: Not regulated.

Section 15: Other Regulatory Information
SARA 302 Components
No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
SARA 313 Components
This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.
SARA 311/312 Hazards
No SARA Hazards
Massachusetts Right To Know Components: N/A
Pennsylvania Right To Know Components: N/A
New Jersey Right To Know Components: N/A
California Prop. 65 Components
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

Section 16: Other Information
References: Not available. Other Special Considerations: Not available.
Last Updated: 07/06/2018 12:00 PM
The information in this SDS is provided in good faith based on our knowledge as of the issue date (or subsequent revision date, if any), and is to be used only as a guide. This SDS does not constitute a guarantee (express or implied) of any kind and we make no warranties or merchantability or fitness for a particular purpose. This information relates only to the designated product as shipped and may not be valid if the product is used in combination with any other materials or is not used in accordance with our instructions. It is the responsibility of the buyer/user to ensure that its activities comply with all applicable governmental requirements. Since conditions of use of the product are not under the control of Phase Genomics, it is the duty of the buyer/user to determine the necessary conditions for the safe use of the product. Phase Genomics will not be liable for any damages resulting from handling or contact with the product.
Finishing Enzyme

Section 1: Chemical Information
Product Name: Finishing Enzyme
Supplier: Phase Genomics, 1617 8th Ave N, Seattle, WA 98109, 1-833-742-7436
Recommended Use: reagent

Section 2: Composition and Information on Ingredients
There are no substances at their given concentration, are considered to be hazardous to health.

Section 3: Hazard Identification
Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)
HNOC: No Data available
Label Elements:
  Appearance: Colorless
  Physical State: Liquid
  Odor: Mild
Other information
1.75723 % of the mixture consists of ingredient(s) of unknown toxicity

Section 4: First Aid Measures
General advice
The product contains no substances which at their given concentration, are considered to be hazardous to health.
Immediate medical attention is required. In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). Remove from exposure, lie down. Do not breathe dust/fume/gas/mist/vapors/spray.

Eye contact
Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.

Skin contact
Wash skin with soap and water.

Inhalation
Remove to fresh air.

Ingestion
Clean mouth with water and drink afterwards plenty of water.
Most important symptoms and effects, both acute and delayed
No information available.
Indication of any immediate medical attention and special treatment needed.
Note to physicians: Treat symptomatically.

Section 5: Fire and Explosion Data
Suitable extinguishing media
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media
CAUTION: Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the chemical
No information available.

Protective equipment and precautions for firefighters
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

Section 6: Accidental Release Measures
Personal precautions
Ensure adequate ventilation, especially in confined areas.

Personal protective equipment [PPE]
Use personal protection recommended in Section 8.

Environmental precautions
See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up
Methods for containment
Prevent further leakage or spillage if safe to do so.

Methods for cleaning up
Soak up with inert absorbent material. Pick up and transfer to properly labeled containers. This material and its container must be disposed of as hazardous waste.

Section 7: Handling and Storage
Precautions for safe handling
Handle in accordance with good industrial hygiene and safety practice.
SAFETY DATA SHEET: Proximo Hi-C (Microbe) Kit

 Conditions for safe storage, including any incompatibilities
 Storage temperature
   Keep at -20 degrees Celsius.
 Storage Conditions
   Keep/store only in original container.
 Incompatible materials
   None known based on information supplied.

Section 8: Exposure Controls and Personal Protection
 Exposure Guidelines
   This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.
 Other information
   Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).
 Appropriate engineering controls
   Showers. Eyewash stations.
 Individual protection measures, such as personal protective equipment
   Eye/face protection
     Wear safety glasses with side shields (or goggles).
 Skin and body protection
   Wear suitable protective clothing and gloves.
 Respiratory protection
   Use in well ventilated areas.
 General hygiene considerations
   Handle in accordance with good industrial hygiene and safety practice.

Section 9: Physical and Chemical Properties
 Physical State: Form: Liquid
 Color: Clear or colorless
 Odor: None
 Property: No information available

Section 10: Stability and Reactivity Data
 Reactivity: No data available.
 Chemical Stability: Stable under normal conditions
 Possibility of Hazardous Reactions: Can react briskly with oxidizers- danger of explosion.
 Conditions to Avoid: Incompatible materials, ignition sources, heat.
 Incompatible Materials: Strong oxidizing agents
 Hazardous Decomposition Products: Thermal decomposition can lead to release of irritating and toxic gases and vapors. Carbon monoxide. Carbon dioxide (CO2).

Section 11: Toxicological Information
 Information on likely routes of exposure
   Inhalation
     Avoid breathing vapors or mists. May cause irritation of respiratory tract.
   Eye contact
     Redness. May cause slight irritation.
   Skin contact
     Prolonged contact may cause redness and irritation. Repeated exposure may cause skin dryness or cracking.
   Ingestion
     May cause drowsiness or dizziness. Ingestion causes burns of the upper digestive and respiratory tracts. Symptoms include burning sensation, coughing, wheezing, shortness of breath, headache, nausea, and vomiting.

Section 12: Ecological Information
 Ecotoxicity
   No information available.

   1.75723 % of the mixture consists of component(s) of unknown hazards to the aquatic environment.

Section 13: Disposal Considerations
 Waste treatment methods
 Relevant Information
   Keep out of drains, sewers, ditches and waterways.
 Disposal considerations

Page 21 of 69 1-833-PHAS-GEN support@phasegenomics.com
Use a licensed professional waste disposal service to dispose of this product. Product may be dissolved in a combustible solvent or absorbed onto a combustible material and burned by a chemical incinerator.

Contaminated packaging
Empty containers must be tripled rinsed prior to disposal.

Section 14: Transport Information
This product is not dangerous and no special precautions are needed according to DOT, ADR/RID (cross border), IMDG and IATA/ICAO.

Section 15: Other Regulatory Information

International Inventories
TSCA: Complies

Legend:
TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

US Federal Regulations
CWA (Clean Water Act)
This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA
This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

US State Regulations
California Proposition 65
This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations
U.S. EPA Label Information
EPA Pesticide Registration Number: Not applicable

Section 16: Other Information

References: Not available. Other Special Considerations: Not available.

Last Updated: 07/06/2018 12:00 PM
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SAFETY DATA SHEET: Proximo Hi-C (Microbe) Kit

Fragmentation Buffer

Section 1: Chemical Information
Product Name: Proximo Fragmentation Buffer
Supplier: Phase Genomics, 4000 Mason Road, Seattle, WA 98195, 1-833-742-7436
Recommended Use: Reagent

Section 2: Hazard Identification
Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)
HNOC: No Data available
Label Elements:
Appearance: Colorless
Physical State: Liquid
Odor: Mild

Section 3: Composition and Information on Ingredients
Mixture
There are no substances at their given concentration, are considered to be hazardous to health.

Section 4: First Aid Measures
General advice
The product contains no substances which at their given concentration, are considered to be hazardous to health.
Immediate medical attention is required. In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). Remove from exposure, lie down. Do not breathe dust/fume/gas/mist/vapors/spray.

Eye contact
Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.

Skin contact
Wash skin with soap and water.

Inhalation
Remove to fresh air.

Ingestion
Clean mouth with water and drink afterwards plenty of water.
Most important symptoms and effects, both acute and delayed
No information available.
Indication of any immediate medical attention and special treatment needed
Note to physicians: Treat symptomatically.

Section 5: Fire and Explosion Data
Suitable extinguishing media
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media
CAUTION: Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the chemical
No information available.

Protective equipment and precautions for firefighters
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

Section 6: Accidental Release Measures
Personal precautions
Ensure adequate ventilation, especially in confined areas.

Personal protective equipment [PPE]
Use personal protection recommended in Section 8.

Environmental precautions
See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up
Prevent further leakage or spillage if safe to do so.

Methods for cleaning up
Soak up with inert absorbent material. Pick up and transfer to properly labeled containers. This material and its container must be disposed of as hazardous waste.

Section 7: Handling and Storage
Precautions for safe handling
Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities:
SAFETY DATA SHEET: Proximo Hi-C (Microbe) Kit

**Storage temperature**
Keep at -20 degrees Celsius.

**Storage Conditions**
Keep/store only in original container.

**Incompatible materials**
None known based on information supplied.

### Section 8: Exposure Controls and Personal Protection

**Exposure Guidelines**
This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

**Appropriate engineering controls**
Showers. Eyewash stations.

**Individual protection measures, such as personal protective equipment**
Eye/face protection
Wear safety glasses with side shields (or goggles).

**Skin and body protection**
Wear suitable protective clothing and gloves.

**Respiratory protection**
Use in well ventilated areas.

**General hygiene considerations**
Handle in accordance with good industrial hygiene and safety practice.

### Section 9: Physical and Chemical Properties

**Physical State:** Form: Liquid
**Color:** Clear or colorless
**Odor:** None
**Property:** No information available

### Section 10: Stability and Reactivity Data

**Reactivity:** No data available.

**Chemical Stability:** Stable under normal conditions

**Possibility of Hazardous Reactions:** Can react briskly with oxidizers - danger of explosion.

**Conditions to Avoid:** Incompatible materials, ignition sources, heat.

**Incompatible Materials:** Strong oxidizing agents

**Hazardous Decomposition Products:** Thermal decomposition can lead to release of irritating and toxic gases and vapors. Carbon monoxide. Carbon dioxide (CO2).

### Section 11: Toxicological Information

**Information on likely routes of exposure**

**Inhalation**
Avoid breathing vapors or mists. May cause irritation of respiratory tract.

**Eye contact**
Redness. May cause slight irritation.

**Skin contact**
Prolonged contact may cause redness and irritation. Repeated exposure may cause skin dryness or cracking.

**Ingestion**
May cause drowsiness or dizziness. Ingestion causes burns of the upper digestive and respiratory tracts. Symptoms include burning sensation, coughing, wheezing, shortness of breath, headache, nausea, and vomiting.

### Section 12: Ecological Information

**Ecotoxicity**
99% of the mixture consists of component(s) of unknown hazards to the aquatic environment.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Algae/aquatic plants</th>
<th>Fish</th>
<th>Crustacea</th>
</tr>
</thead>
<tbody>
<tr>
<td>Magnesium Chloride</td>
<td>7786-30-3</td>
<td>2200: 72 h Desmodesmus subspicatus mg/L EC50</td>
<td>4210: 96 h Gambusia affinis mg/L LC50 static 1970 - 3880: 96 h Pimephales</td>
</tr>
</tbody>
</table>

All other data unavailable

### Section 13: Disposal Considerations

**Waste treatment methods**

Page 24 of 69  1-833-PHAS-GEN  support@phagegenomics.com
Relevant Information
Keep out of drains, sewers, ditches and waterways.

Disposal considerations
Use a licensed professional waste disposal service to dispose of this product. Product may be dissolved in a combustible solvent or absorbed onto a combustible material and burned by a chemical incinerator.

Contaminated packaging
Empty containers must be tripled rinsed prior to disposal.

Section 14: Transport Information
This product is not dangerous and no special precautions are needed according to DOT, ADR/RID (cross border), IMDG and IATA/ICAO.

Section 15: Other Regulatory Information
International Inventories
TSCA: Complies

Legend:
TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

US Federal Regulations
CWA (Clean Water Act)
This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA
This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendemnts and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

US State Regulations
California Proposition 65
This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations
U.S. EPA Label Information
EPA Pesticide Registration Number: Not applicable

Section 16: Other Information
References: Not available. Other Special Considerations: Not available.
Last Updated: 07/06/2018 12:00 PM
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Fragmentation Enzyme

Section 1: Chemical Information
Product Name: Proximo Fragmentation Enzyme
Supplier: Phase Genomics, 4000 Mason Road, Seattle, WA 98195, 1-833-742-7436
Recommended Use: Reagent

Section 2: Hazard Identification
Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)
HNOC: No Data available
Label Elements:
Appearance: Colorless
Physical State: Liquid
Odor: Mild

Section 3: Composition and Information on Ingredients
There are no substances at their given concentration, are considered to be hazardous to health.

Section 4: First Aid Measures
General advice
The product contains no substances which at their given concentration, are considered to be hazardous to health.
Immediate medical attention is required. In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). Remove from exposure, lie down. Do not breathe dust/fume/gas/mist/vapors/spray.

Eye contact
Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.

Skin contact
Wash skin with soap and water.

Inhalation
Remove to fresh air.

Ingestion
Clean mouth with water and drink afterwards plenty of water.

Most important symptoms and effects, both acute and delayed

Indication of any immediate medical attention and special treatment needed
Note to physicians: Treat symptomatically.

Section 5: Fire and Explosion Data
Suitable extinguishing media
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media
CAUTION: Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the chemical
No information available.

Protective equipment and precautions for firefighters
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

Section 6: Accidental Release Measures
Personal precautions
Ensure adequate ventilation, especially in confined areas.

Personal protective equipment [PPE]
Use personal protection recommended in Section 8.

Environmental precautions
See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up
Methods for containment
Prevent further leakage or spillage if safe to do so.

Methods for cleaning up
Soak up with inert absorbent material. Pick up and transfer to properly labeled containers. This material and its container must be disposed of as hazardous waste.

Section 7: Handling and Storage
Precautions for safe handling
Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Storage temperature
SAFETY DATA SHEET: Proximo Hi-C (Microbe) Kit

Keep at -20 degrees Celsius.

Storage Conditions
Keep/store only in original container.

Incompatible materials
None known based on information supplied.

Section 8: Exposure Controls and Personal Protection

Exposure Guidelines
This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>NIOSH IDLH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glycerol 56-81-5</td>
<td>-</td>
<td>TWA: 15 mg/m³ mist, total particulate TWA: 5 mg/m³ mist, respirable fraction (vacated) TWA: 10 mg/m³ mist, total particulate (vacated) TWA: 5 mg/m³ mist, respirable fraction</td>
<td>-</td>
</tr>
</tbody>
</table>

Other Information
Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Appropriate engineering controls
Showers. Eyewash stations.

Individual protection measures, such as personal protective equipment
Eye/face protection
Wear safety glasses with side shields (or goggles).

Skin and body protection
Wear suitable protective clothing and gloves.

Respiratory protection
Use in well ventilated areas.

General hygiene considerations
Handle in accordance with good industrial hygiene and safety practice.

Section 9: Physical and Chemical Properties

Physical State: Form: Liquid
Color: Clear or colorless
Odor: None
Property: No information available

Section 10: Stability and Reactivity Data

Reactivity: No data available.
Chemical Stability: Stable under normal conditions
Possibility of Hazardous Reactions: Can react briskly with oxidizers- danger of explosion.
Conditions to Avoid: Incompatible materials, ignition sources, heat.
Incompatible Materials: Strong oxidizing agents
Hazardous Decomposition Products: Thermal decomposition can lead to release of irritating and toxic gases and vapors. Carbon monoxide. Carbon dioxide (CO2).

Section 11: Toxicological Information

Information on likely routes of exposure Inhalation
Avoid breathing vapors or mists. May cause irritation of respiratory tract.

Eye contact
Redness. May cause slight irritation.

Skin contact
Prolonged contact may cause redness and irritation. Repeated exposure may cause skin dryness or cracking.

Ingestion
May cause drowsiness or dizziness. Ingestion causes burns of the upper digestive and respiratory tracts. Symptoms include burning sensation, coughing, wheezing, shortness of breath, headache, nausea, and vomiting.

Section 12: Ecological Information

Ecotoxicity
0.26 % of the mixture consists of component(s) of unknown hazards to the aquatic environment.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Algae/aquatic plants</th>
<th>Fish</th>
<th>Crustacea</th>
</tr>
</thead>
</table>
**SAFETY DATA SHEET: Proximo Hi-C (Microbe) Kit**

| Glycerol 56-81-5 | - | S1 – S7: 96 h Oncorhynchus mykiss mL/L LC50 static | 500: 24 h Daphnia magna mg/L EC50 |
| Ethylenediamine tetraacetic acid 60-00-4 | 1.01: 72 h Desmodesmus subspicatus mg/L EC50 | 44.2 – 76.5: 96 h Pimephales promelas mg/L LC50 static 34 - 62: 96 h Lepomis macrochirus mg/L LC50 static | 113: 48 h Daphnia magna mg/L EC50 Static |

All other data unavailable

**Section 13: Disposal Considerations**

**Waste treatment methods**

**Relevant Information**

Keep out of drains, sewers, ditches and waterways.

**Disposal considerations**

Use a licensed professional waste disposal service to dispose of this product. Product may be dissolved in a combustible solvent or absorbed onto a combustible material and burned by a chemical incinerator.

**Contaminated packaging**

Empty containers must be tripled rinsed prior to disposal.

**Section 14: Transport Information**

This product is not dangerous and no special precautions are needed according to DOT, ADR/RID (cross border), IMDG and IATA/ICAO.

**Section 15: Other Regulatory Information**

**International Inventories**

**TSCA**

Complies

**Legend:**

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

**US Federal Regulations**

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

**US State Regulations**

California Proposition 65

This product does not contain any Proposition 65 chemicals.

**U.S. State Right-to-Know Regulations**

**U.S. EPA Label Information**

**EPA Pesticide Registration Number:** Not applicable

**Section 16: Other Information**

**References:** Not available. **Other Special Considerations:** Not available.

**Last Updated:** 07/06/2018 12:00 PM

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SAFETY DATA SHEET: Proximo Hi-C (Microbe) Kit

Frag/AT Buffer, Frag/AT Enzymes, Adapter Ligation Mix, Hot Start PCR Mix

Section 1: Chemical Information
- Product Name: Frag/AT Buffer, Frag/AT Enzymes, Adapter Ligation Mix, Hot Start PCR Mix
- Recommended Use: reagent
- Supplier: Phase Genomics, 1617 8th Ave N, Seattle, WA 98109, 1-833-742-7436

Section 2: Composition and Information on Ingredients
- There are no substances at their given concentration, are considered to be hazardous to health.
- Label Elements:
  - Appearance: Colorless
  - Physical State: Liquid
  - Chemical Characterization: Solution(s) consisting of the following component:
    - Glycerol - 20-60%
    - CAS: 56-81-5

Components not listed are not considered dangerous at their utilized concentrations.

Section 3: Hazard Identification
- Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)
- Glycerol, CAS No. 56-81-5, 30-60% by weight

Section 4: First Aid Measures
- General advice
  - The product contains no substances which at their given concentration, are considered to be hazardous to health.
  - Immediate medical attention is required. In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). Remove from exposure, lie down. Do not breathe dust/fume/gas/mist/vapors/spray.
- Eye contact
  - Rinse eyes with water for at least 15 minutes. If irritation persists seek medical attention
- Skin contact
  - Wash skin with soap and water. If irritation persists seek medical attention.
- Inhalation
  - Move to fresh air, if irritation persists seek medical attention.
- Ingestion
  - Rinse mouth with water if the person is conscious. Do not induce vomiting unless instructed to do so by a medical professional. If irritation persists seek medical attention.

Most important symptoms and effects, both acute and delayed
- No information available.

Indication of any immediate medical attention and special treatment needed
- Note to physicians: Treat symptomatically.

Section 5: Fire and Explosion Data
- Suitable extinguishing media
  - Water, Water spray (fog), Foam, Dry chemical, Carbon dioxide (CO2)
- Unsuitable extinguishing media
  - N/A
- Specific hazards arising from the chemical
  - N/A
- Protective equipment and precautions for firefighters
  - As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

Section 6: Accidental Release Measures
- Personal precautions
  - Ensure adequate ventilation, especially in confined areas. Use personal protective equipment as required.
- Personal protective equipment [PPE]
  - Use personal protection recommended in Section 8.
- Environmental precautions
  - See Section 12 for additional Ecological Information.
- Methods and material for containment and cleaning up
  - Methods for containment: Prevent further leakage or spillage if safe to do so.
  - Methods for cleaning up: Soak up with inert absorbent material. Pick up and transfer to properly labeled containers. This material and its container must be disposed of as hazardous waste.

Section 7: Handling and Storage
SAFETY DATA SHEET: Proximo Hi-C (Microbe) Kit

Precautions for safe handling
Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities
Storage temperature
Keep container tightly closed in a dry and well-ventilated place. Keep/store only in original container. Store away from incompatible materials.

Storage Conditions
Keep container tightly closed. Keep/store only in original container. Store away from incompatible materials. Store at -15° C to -25° C (5° F to -13° F).

Incompatible materials
Strong oxidizing agents.

Section 8: Exposure Controls and Personal Protection

Exposure Guidelines
Glycerol, 56081-5
OSHA PEL:
- TWA: 15 mg/m3 mist, total particulate
- TWA: 5 mg/m3 mist, respirable fraction
- TWA: 10 mg/m3 mist, total particulate
- TWA: 5 mg/m3 mist, respirable fraction
OSHA PEL (Ceiling): n/a
ACGIH OEL (STEL): n/a

Other information: N/A
Appropriate engineering controls
Showers. Eyewash stations.

Individual protection measures, such as personal protective equipment
Eye/face protection
Wear safety glasses with side shields (or goggles).

Skin and body protection
Wear suitable protective clothing and gloves.

Respiratory protection
If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

General hygiene considerations
Handle in accordance with good industrial hygiene and safety practice.

Section 9: Physical and Chemical Properties

Physical State: Form: Liquid
Color: Clear or colorless
Odor: Mild
Property: No information available
pH: 6.0-9.0
Water Solubility: Fully Miscible
Partition Coefficient: Data not available
Molecular Weight: Data not available
Density: Data not available
Viscosity: Data not available
Specific Gravity: Data not available
Melting Point/Freezing Point: Data not available
Boiling Point/Boiling Range: Data not available
Evaporation Rate: Data not available
Flash Point: Data not available
Flammability: Product is not self igniting.
Autoignition Temperature: Data not available
Decomposition Temperature: Data not available
Vapor Pressure: Data not available
Vapor Density: Data not available
Upper Explosion Limit: Data not available
Lower Explosion Limit: Data not available
Explosive Properties: Product does not possess explosive properties.
Oxidizing Properties: Data not available
Odor Threshold: Data not available

Section 10: Stability and Reactivity Data
Reactivity: The product is stable and non-reactive under normal conditions of use, storage and transport.
SAFETY DATA SHEET: Proximo Hi-C (Microbe) Kit

Chemical Stability: Stable under normal conditions
Possibility of Hazardous Reactions: N/A
Conditions to Avoid: N/A
Incompatible Materials: Strong oxidizing agents
Hazardous Decomposition Products: None known based on information supplied.

Section 11: Toxicological Information
Low hazard for usual industrial or commercial handling by trained personnel
Information on likely routes of exposure Inhalation
Under normal conditions of intended use, this material is not expected to be an inhalation hazard.

Eye contact
May cause slight irritation

Skin contact
May cause slight irritation.

Ingestion
May cause irritation of the digestive tract resulting in nausea and vomiting.

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalation LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glycerol (56-81-5)</td>
<td>≥12,600 mg/kg (Rat)</td>
<td>&gt;10 g/kg (Rabbit)</td>
<td>&gt;570 mg/m³ (Rat) 1h</td>
</tr>
</tbody>
</table>

Skin corrosion/irritation Mild
Serious eye damage/eye irritation Mild
Irritation: Mild
Corrosivity: Mild
Reproductive Toxicity: No information available
Developmental Toxicity: No information available
Skin or Respiratory Sensitization: No information available
Carcinogenicity: No information available
Germ Cell Mutagenicity: No information available
Aspiration Hazard: No information available
Specific Target Organ Toxicity (STOT) Single Exposure: No information available
Specific Target Organ Toxicity (STOT) Repeated Exposure: No information available

Section 12: Ecological Information
Ecotoxicity
This product does not contain any substances known to be hazardous to the environment.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Algae/aquatic plants</th>
<th>Fish</th>
<th>Crustacea</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glycerol 56-81-5</td>
<td>-</td>
<td>51 - 57 mL/L: LC50 96 h Oncorhynchus mykiss static</td>
<td>500 mg/L: EC50 24 h Daphnia magna</td>
</tr>
</tbody>
</table>

Mobility in Soil: No available data
Persistence and Degradability: No available data
Bioaccumulation: No available data
PBT vPvB Assessment: This product does not contain any materials that are assessed to be a PBT or a vPvB.
Other Adverse Effects: No available data

Section 13: Disposal Considerations
Waste treatment methods
Relevant Information
Disposal should be in accordance with applicable regional, national and local laws and regulations. Keep out of drains, sewers, and waterways.

**Contaminated packaging**
Do not reuse container. Disposal should be in accordance with applicable regional, national and local laws and regulations.

**Section 14: Transport Information**
This product is not dangerous and no special precautions are needed according to DOT, ADR/RID (cross border), IMDG and IATA/ICAO.

**Section 15: Other Regulatory Information**

**US Federal Regulations**
- SARA 313: This product is not regulated by SARA.
- Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR61): This product does not contain any HAPs.
- Clean Water Act (CWA) (see 40 CFR 122.21 and 40 CFR 122.42): This product does not contain any pollutant substances

**US State Regulations**
- California Proposition 65
  - This product does not contain any Proposition 65 chemicals.
- U.S. State Right-to-Know Regulations
- Glycerol (56-81-5)
- U.S. EPA Label Information
- EPA Pesticide Registration Number: Not applicable

**WHMIS Hazard Class:**
- Not Controlled.
- This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all the information required by the CPR

**Section 16: Other Information**

**References:** Not available. **Other Special Considerations:** Not available.

**Last Updated:** 11/19/2020 2:00 PM

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Index Mix, Universal Adapter

Section 1: Chemical Information
Product Name: PCR Index Mix, Universal Adapter
Recommended Use: reagent
Supplier: Phase Genomics, 1617 8th Ave N, Seattle, WA 98109, 1-833-742-7436

Section 2: Composition and Information on Ingredients
There are no substances at their given concentration, are considered to be hazardous to health.
Label Elements:
- Appearance: Colorless
- Physical State: Liquid
- Odor: odorless

Section 3: Hazard Identification
Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)
HNOC: No Data available

Section 4: First Aid Measures
General advice
The product contains no substances which at their given concentration, are considered to be hazardous to health.
Immediate medical attention is required. In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). Remove from exposure, lie down. Do not breathe dust/fume/gas/mist/vapors/spray.

Eye contact
Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.

Skin contact
Wash skin with soap and water.

Inhalation
Move to fresh air.

Ingestion
Get medical attention.

Most important symptoms and effects, both acute and delayed
No information available.
Indication of any immediate medical attention and special treatment needed
Note to physicians: Treat symptomatically.

Section 5: Fire and Explosion Data
Suitable extinguishing media
Water, Water spray (fog), Foam, Dry chemical, Carbon dioxide (CO2)

Unsuitable extinguishing media
N/A

Specific hazards arising from the chemical
N/A

Protective equipment and precautions for firefighters
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

Section 6: Accidental Release Measures
Personal precautions
Ensure adequate ventilation, especially in confined areas.

Personal protective equipment [PPE]
Use personal protection recommended in Section 8.

Environmental precautions
See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up Methods for containment
Prevent further leakage or spillage if safe to do so.

Methods for cleaning up
Soak up with inert absorbent material. Pick up and transfer to properly labeled containers. This material and its container must be disposed of as hazardous waste.

Section 7: Handling and Storage
Precautions for safe handling
Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Storage temperature
Keep container tightly closed in a dry and well-ventilated place. Keep/store only in original container. Store away from incompatible materials.

**Storage Conditions**
Keep/store only in original container.

**Incompatible materials**
Strong oxidizing agents.

### Section 8: Exposure Controls and Personal Protection

**Exposure Guidelines**
This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

**Other information**
N/A

**Appropriate engineering controls**
Showers. Eyewash stations.

**Individual protection measures, such as personal protective equipment**
Eye/face protection: Wear safety glasses with side shields (or goggles).

**Skin and body protection**
Wear suitable protective clothing and gloves.

**Respiratory protection**
If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

**General hygiene considerations**
Handle in accordance with good industrial hygiene and safety practice.

### Section 9: Physical and Chemical Properties

**Physical State:** Form: Liquid
Color: Clear or colorless
Odor: None
Property: No information available

### Section 10: Stability and Reactivity Data

**Reactivity:** The product is stable and non-reactive under normal conditions of use, storage and transport.

**Chemical Stability:** Stable under normal conditions
**Possibility of Hazardous Reactions:** None under normal processing.

**Conditions to Avoid:** N/A

**Incompatible Materials:** Strong oxidizing agents

**Hazardous Decomposition Products:** None known based on information supplied.

### Section 11: Toxicological Information

Low hazard for usual industrial or commercial handling by trained professional.

**Information on likely routes of exposure**

**Inhalation**
Under normal conditions of intended use, this material is not expected to be an inhalation hazard.

**Eye contact**
Redness. May cause slight irritation.

**Skin contact**
Prolonged contact may cause redness and irritation.

**Ingestion**
No harmful effects expected in amounts likely to be ingested by accident.

### Section 12: Ecological Information

**Ecotoxicity**
0 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

**Persistence and degradability**
Not a PBT or vPvB substance or mixture.

**Bioaccumulation**
No data available

**Mobility**
No data available

**Other adverse effects**
No data available

### Section 13: Disposal Considerations

**Waste treatment methods**
Relevant Information

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated packaging

Do not reuse container. Disposal should be in accordance with applicable regional, national and local laws and regulations.

Section 14: Transport Information

This product is not dangerous and no special precautions are needed according to DOT, ADR/RID (cross border), IMDG and IATA/ICAO.

Section 15: Other Regulatory Information

International Inventories

<table>
<thead>
<tr>
<th>Inventory</th>
<th>Compliance</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSCA</td>
<td>Does not comply</td>
</tr>
<tr>
<td>DSL/NDSL</td>
<td>Does not comply</td>
</tr>
<tr>
<td>EINECS/ELINCS</td>
<td>Does not comply</td>
</tr>
<tr>
<td>ENCS</td>
<td>Does not comply</td>
</tr>
<tr>
<td>IECSC</td>
<td>Does not comply</td>
</tr>
<tr>
<td>KECL</td>
<td>Does not comply</td>
</tr>
<tr>
<td>PICCS</td>
<td>Does not comply</td>
</tr>
<tr>
<td>AICS</td>
<td>Does not comply</td>
</tr>
</tbody>
</table>

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

<table>
<thead>
<tr>
<th>Hazard Category</th>
<th>Compliance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute health hazard</td>
<td>No</td>
</tr>
<tr>
<td>Chronic Health Hazard</td>
<td>No</td>
</tr>
<tr>
<td>Fire hazard</td>
<td>No</td>
</tr>
<tr>
<td>Sudden release of pressure hazard</td>
<td>No</td>
</tr>
<tr>
<td>Reactive Hazard</td>
<td>No</td>
</tr>
</tbody>
</table>

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

This product does not contain any substances regulated by state right-to-know regulations

U.S. EPA Label Information

EPA Pesticide Registration Number: Not applicable

Section 16: Other Information

References: Not available. Other Special Considerations: Not available.

Last Updated: 07/06/2018 12:00 PM

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Ligation Buffer

Section 1: Chemical Information

Product Name: Ligation Buffer  
Supplier: Phase Genomics, 1617 8th Ave N, Seattle, WA 98109, 1-833-742-7436  
Recommended Use: reagent

Section 2: Composition and Information on Ingredients

Composition: The product contains no substances which at their given concentration, are considered to be hazardous to health.

Section 3: Hazard Identification

Potential Acute Health Effects: none  
Potential Chronic Health Effects: None

Section 4: First Aid Measures

Eye Contact: Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.  
Skin Contact: Wash skin with soap and water.  
Inhalation: Remove to fresh air.  
Ingestion: Clean mouth with water and drink afterwards plenty of water.

Section 5: Fire and Explosion Data

Flammability of the Product: Non-flammable  
Fire Hazards in Presence of Various Substances: Non-flammable  
Explosion Hazards in Presence of Various Substances: No information available  
Fire Fighting Media and Instructions: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.  
Special Remarks on Fire Hazards: No information available  
Special Remarks on Explosion Hazards: None

Section 6: Accidental Release Measures

Small Spill: Dilute with water and mop up or absorb and place in an appropriate waste disposal container.  
Large Spill: Dilute with water and mop up or absorb and place in an appropriate waste disposal container.

Section 7: Handling and Storage

Precautions: Handle in accordance with good industrial hygiene and safety practice.  
Storage: Keep/store only in original container.

Section 8: Exposure Controls and Personal Protection

Engineering Controls: Ensure that eyewash stations and safety showers are proximal to the work-station location.  
Personal Protection: Safety glasses. Lab coat. Gloves  
Personal Protection in Case of a Large Spill: Safety glasses. Lab coat. Gloves  
Exposure Limits: No information available.

Section 9: Physical and Chemical Properties

Physical state and appearance: Liquid.  
Odor: Mild Taste: Not available.  
Molecular Weight: No information available  
Color: Clear Colorless.  
PH (1% soln/water): No information available  
Boiling Point: No information available  
Melting Point: No information available
Critical Temperature: No information available
Specific Gravity: No information available
Vapor Pressure: No information available
Vapor Density: No information available
Volatile: 100% (w/w).
Odor Threshold: No information available
Water/Oil Dist. Coeff.: Not available.
Ionicity (in Water): No information available
Dispersion Properties: No information available
Solubility: No information available

Section 10: Stability and Reactivity Data
Stability: The product is stable.
Instability Temperature: Not available.
Conditions of Instability: No information available
Incompatibility with various substances: Strong oxidizing agents
Corrosivity: No information available

Special Remarks on Reactivity: Thermal decomposition can lead to release of irritating and toxic gases and vapors. Carbon monoxide. Carbon dioxide (CO2).
Special Remarks on Corrosivity: Not available.
Polymerization: Will not occur.

Section 11: Toxicological Information
Routes of Entry: Absorbed through skin. Dermal contact. Eye contact. Inhalation.
Toxicity to Animals: None
Chronic Effects on Humans: None
Other Toxic Effects on Humans: May cause drowsiness or dizziness. Ingestion causes burns of the upper digestive and respiratory tracts. Symptoms include burning sensation, coughing, wheezing, shortness of breath, headache, nausea, and vomiting.

Section 12: Ecological Information
Ecotoxicity: 8.16 % of the mixture consists of component(s) of unknown hazards to the aquatic environment.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Algae/aquatic plants</th>
<th>Fish</th>
<th>Toxicity to microorganisms</th>
<th>Crustacea</th>
</tr>
</thead>
<tbody>
<tr>
<td>Magnesium Chloride</td>
<td>2200: 72 h Desmodesmus subspicatus mg/L EC50</td>
<td>4210: 96 h Gambusia affinis mg/L LC50 static 1970 - 3880: 96 h Pimephales promelas mg/L LC50 static</td>
<td>-</td>
<td>140: 48 h Daphnia magna mg/L EC50 Static 1400: 24 h Daphnia magna mg/L EC50</td>
</tr>
</tbody>
</table>

Products of Biodegradation: No information available

Section 13: Disposal Considerations
Waste Disposal: Use a licensed professional waste disposal service to dispose of this product. Product may be dissolved in a combustible solvent or absorbed onto a combustible material and burned by a chemical incinerator.

Section 14: Transport Information
DOT Classification: Not regulated
Special Provisions for Transport: Not available.

Section 15: Other Regulatory Information
Federal and State Regulations: CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).
Other Regulations:
CERCLA: This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level.
Section 16: Other Information

References: Not available. Other Special Considerations: Not available.

Last Updated: 07/06/2018 12:00 PM

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Ligation Enzyme

Section 1: Chemical Information
Product Name: Ligation Enzyme
Supplier: Phase Genomics, 1617 8th Ave N, Seattle, WA 98109, 1-833-742-7436
Recommended Use: reagent

Section 2: Composition and Information on Ingredients
There are no substances at their given concentration, are considered to be hazardous to health.

Section 3: Hazard Identification
Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)
HNOC: No Data available
Label Elements:
Appearance: Colorless
Physical State: Liquid
Odor: Mild

Section 4: First Aid Measures
General advice
The product contains no substances which at their given concentration, are considered to be hazardous to health.
Immediate medical attention is required. In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). Remove from exposure, lie down. Do not breathe dust/fume/gas/mist/vapors/spray.

Eye contact
Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.

Skin contact
Wash skin with soap and water.

Inhalation
Remove to fresh air.

Ingestion
Clean mouth with water and drink afterwards plenty of water.

Section 5: Fire and Explosion Data
Suitable extinguishing media
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media
CAUTION: Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the chemical
No information available.

Protective equipment and precautions for firefighters
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

Section 6: Accidental Release Measures
Personal precautions
Ensure adequate ventilation, especially in confined areas.

Personal protective equipment [PPE]
Use personal protection recommended in Section 8.

Environmental precautions
See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up Methods for containment
Prevent further leakage or spillage if safe to do so.

Methods for cleaning up
Soak up with inert absorbent material. Pick up and transfer to properly labeled containers. This material and its container must be disposed of as hazardous waste.

Section 7: Handling and Storage
Precautions for safe handling
Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Storage temperature
Keep at -20 degrees Celsius.

**Storage Conditions**
Keep/store only in original container.

**Incompatible materials**
None known based on information supplied.

**Section 8: Exposure Controls and Personal Protection**

**Exposure Guidelines**
This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

**Other information**
Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

**Appropriate engineering controls**
Showers. Eyewash stations.

**Individual protection measures, such as personal protective equipment**
**Eye/face protection**
Wear safety glasses with side shields (or goggles).

**Skin and body protection**
Wear suitable protective clothing and gloves.

**Respiratory protection**
Use in well ventilated areas.

**General hygiene considerations**
Handle in accordance with good industrial hygiene and safety practice.

**Section 9: Physical and Chemical Properties**

**Physical State:** Form: Liquid
Color: Clear or colorless
Odor: None
Property: No information available

**Section 10: Stability and Reactivity Data**

**Reactivity:** No data available.

**Chemical Stability:** Stable under normal conditions

**Possibility of Hazardous Reactions:** Can react briskly with oxidizers- danger of explosion.

**Conditions to Avoid:** Incompatible materials, ignition sources, heat.

**Incompatible Materials:** Strong oxidizing agents

**Hazardous Decomposition Products:** Thermal decomposition can lead to release of irritating and toxic gases and vapors. Carbon monoxide. Carbon dioxide (CO2).

**Section 11: Toxicological Information**

**Information on likely routes of exposure**

**Inhalation**
Avoid breathing vapors or mists. May cause irritation of respiratory tract.

**Eye contact**
Redness. May cause slight irritation.

**Skin contact**
Prolonged contact may cause redness and irritation. Repeated exposure may cause skin dryness or cracking.

**Ingestion**
May cause drowsiness or dizziness. Ingestion causes burns of the upper digestive and respiratory tracts. Symptoms include burning sensation, coughing, wheezing, shortness of breath, headache, nausea, and vomiting.

**Section 12: Ecological Information**

**Ecotoxicity**
0.18 % of the mixture consists of component(s) of unknown hazards to the aquatic environment.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Algae/aquatic plants</th>
<th>Fish</th>
<th>Crustacea</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glycerol 56-81-5</td>
<td>-</td>
<td>51 - 57: 96 h Oncorhynchus mykiss mL/L LC50 static</td>
<td>500: 24 h Daphnia magna mg/L EC50</td>
</tr>
<tr>
<td>Potassium Chloride 7447-40-7</td>
<td>2500: 72 h Desmodesmus subspicatus mg/L ECS0</td>
<td>1060: 96 h Lepomis macrochirus mg/L LC50 static 750 - 1020: 96 h Pimephales promelas mg/L LC50 static</td>
<td>825: 48 h Daphnia magna mg/L EC50 83: 48 h Daphnia magna mg/L EC50 Static</td>
</tr>
</tbody>
</table>
SAFETY DATA SHEET: Proximo Hi-C (Microbe) Kit

| Ethylenediamine tetraacetic acid 60-00-4 | 1.01: 72 h Desmodesmus subspicatus mg/L EC50 | 44.2 - 76.5: 96 h Pimephales promelas mg/L LC50 static 34 - 62: 96 h Lepomis macrochirus mg/L LC50 static | 113: 48 h Daphnia magna mg/L EC50 Static |

All other data unavailable

Section 13: Disposal Considerations

**Waste treatment methods**

Relevant Information

Keep out of drains, sewers, ditches and waterways.

Disposal considerations

Use a licensed professional waste disposal service to dispose of this product. Product may be dissolved in a combustible solvent or absorbed onto a combustible material and burned by a chemical incinerator.

Contaminated packaging

Empty containers must be tripled rinsed prior to disposal.

Section 14: Transport Information

This product is not dangerous and no special precautions are needed according to DOT, ADR/RID (cross border), IMDG and IATA/ICAO.

Section 15: Other Regulatory Information

**International Inventories**

TSCA: Complies

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

**US Federal Regulations**

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

**US State Regulations**

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

U.S. EPA Label Information

EPA Pesticide Registration Number: Not applicable

Section 16: Other Information

**References:** Not available. **Other Special Considerations:** Not available.

**Last Updated:** 07/06/2018 12:00 PM

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Lysis Buffer 1

Section 1: Chemical Information
Product Name: Lysis Buffer
Supplier: Phase Genomics, 1617 8th Ave N, Seattle, WA 98109, 1-833-742-7436
Recommended Use: Reagent

Section 2: Hazard Identification
GHS – Classification:
Signal Word: WARNING

Hazards of product: Serious Eye Damage/Eye Irritation Category 2
Physical Hazards: not hazardous

Hazard statements
H319 - Causes serious eye irritation
H402 - Harmful to aquatic life

Precautionary statements
P264 - Wash hands thoroughly after handling
P280 - Wear protective gloves/protective clothing/eye protection/face protection
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P337 + P313 - If eye irritation persists: Get medical advice/attention
P273 - Avoid release to the environment

Label Elements:
Appearance: Colorless
Physical State: Liquid
Odor: Mild

Potential Effects of a Single Acute Exposure
Inhalation: May be harmful by inhalation.
Eye Contact: May cause eye irritation with susceptible persons.
Skin Contact: May cause skin irritation in susceptible persons.
Skin Absorption: No evidence of harmful effects from available information.
Ingestion: May be harmful if swallowed.
HMIS:

<table>
<thead>
<tr>
<th></th>
<th>1</th>
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<th>0</th>
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</thead>
<tbody>
<tr>
<td>Health</td>
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<td></td>
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<tr>
<td>Flammability</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reactivity</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Section 3: Composition and Information on Ingredients
Component | CAS # | %W/W
-----------|-------|-----
Triton X-100 | 9036-19-5 | 1%

Section 4: First Aid Measures
Eye contact
Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician.

Skin contact
Rinse with plenty of water. If symptoms arise, call a physician.

Inhalation
Move to fresh air. If symptoms persist, call a physician. If not breathing, give artificial respiration.

Ingestion
Never give anything by mouth to an unconscious person. If symptoms persist, call a physician. Do not induce vomiting without medical advice.

Notes to Physician
Treat symptomatically.

Section 5: Fire and Explosion Data
Suitable extinguishing media

Specific hazards arising from the chemical
No information available.

Protective equipment and precautions for firefighters
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

Section 6: Accidental Release Measures
Personal precautions
Ensure adequate ventilation, especially in confined areas.

Personal protective equipment (PPE)
Use personal protection recommended in Section 8.

Environmental precautions
See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up
Methods for containment
Prevent further leakage or spillage if safe to do so.

Methods for cleaning up
Soak up with inert absorbent material. Pick up and transfer to properly labeled containers. This material and its container must be disposed of as hazardous waste.

Section 7: Handling and Storage
Precautions for safe handling
Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities
Storage temperature
Keep at -20 degrees Celsius.

Storage Conditions
Keep/store only in original container.

Incompatible materials
None known based on information supplied.

Section 8: Exposure Controls and Personal Protection
Exposure Guidelines
This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>NIOSH IDLH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Triton X-100</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Appropriate engineering controls
Showers. Eyewash stations. Ensure adequate ventilation, especially in confined areas.

Individual protection measures, such as personal protective equipment
Eye/face protection
Wear safety glasses with side shields (or goggles).

Skin and body protection
Wear suitable protective clothing and gloves.

Respiratory protection
Use in well ventilated areas. In case of insufficient ventilation wear suitable respiratory equipment.
SAFETY DATA SHEET: Proximo Hi-C (Microbe) Kit

General hygiene considerations
Handle in accordance with good industrial hygiene and safety practice.

Section 9: Physical and Chemical Properties
Physical State: Form: Liquid
Color: Clear or colorless
Odor: None
Property: No information available

Section 10: Stability and Reactivity Data
Reactivity: No data available.
Chemical Stability: Stable under normal conditions
Possibility of Hazardous Reactions: Can react briskly with oxidizers- danger of explosion.
Conditions to Avoid: Incompatible materials, ignition sources, heat.
Incompatible Materials: Strong oxidizing agents
Hazardous Decomposition Products: None under normal use

Section 11: Toxicological Information

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>LD50 (oral,rat/mouse)</th>
<th>LD50 (dermal,rat/rabbit)</th>
<th>LC50 (inhalation,rat/mouse)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Triton X-100</td>
<td>≥ 1800 mg/kg (Rat)</td>
<td>no data available</td>
<td>no data available</td>
</tr>
</tbody>
</table>

Information on likely routes of exposure Inhalation
Avoid breathing vapors or mists. May cause irritation of respiratory tract.
Eye contact
May cause eye irritation with susceptible persons.
Skin contact
May cause skin irritation in susceptible persons.
Inhalation
May be harmful by inhalation.
Ingestion
May be harmful if swallowed.

Section 12: Ecological Information

Ecotoxicity
No information available.
Acute aquatic toxicity
Category 3
Chronic aquatic toxicity
Not classified chronic
Mobility
No information available.
Biodegradation
Inherently biodegradable
Hazardous decomposition products
None under normal use
Bioaccumulation
Does not bioaccumulate.

Section 13: Disposal Considerations

Waste treatment methods
Relevant Information
Keep out of drains, sewers, ditches and waterways.
Disposal considerations
Use a licensed professional waste disposal service to dispose of this product. Product may be dissolved in a combustible solvent or absorbed onto a combustible material and burned by a chemical incinerator.
Contaminated packaging
Empty containers must be tripled rinsed prior to disposal.

Section 14: Transport Information
Section 15: Other Regulatory Information

International Inventories
TSCA Listed: Triton X-100 9002-93-1 (1)

Legend:
TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

US Federal Regulations
SARA 313
This product is not regulated by SARA.

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)
This product does not contain HAPs.

US State Regulations
California Proposition 65
This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations
US EPA Label Information
EPA Pesticide Registration Number: Not applicable

WHMIS Hazard Class
D2B Toxic materials
This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR

Section 16: Other Information

References: Not available. Other Special Considerations: Not available.

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Lysis Buffer 2

Section 1: Chemical Information
Product Name: Lysis Buffer 2
Supplier: Phase Genomics, 1617 8th Ave N, Seattle, WA 98109, 1-833-742-7436
Recommended Use: reagent

Section 2: Composition and Information on Ingredients
There are no substances at their given concentration, are considered to be hazardous to health.

Section 3: Hazard Identification
Sodium dodecyl sulfate solution Cas # 151-21-3

Section 4: First Aid Measures
General Advice: Wear protective gloves/protective clothing/eye protection/face protection.
If Inhaled: If not breathing, give artificial respiration. Consult doctor in case of complaints.
In Case of Skin Contact: Wash with soap and water. Generally doesn’t irritate.
In Case of Eye Contact: Remove contact lenses, if present and easy to do. Continue rinsing.
If Swallowed: N/A
Most Important Symptoms and Effects, Acute and Delayed: N/A
Recommendations for Immediate Medical Attention and Special Treatment: Treat symptomatically.

Section 5: Fire and Explosion Data
Conditions of Flammability: Not flammable or combustible.
Suitable Extinguishing Media: Dry powder, CO2, water spray or regular foam.
Special Protective Equipment for Firefighters: Wear self-contained breathing apparatus, if necessary.
Hazardous Combustion Products: Further Information: N/A
Further information: N/A

Section 6: Accidental Release Measures
Personal Precautions: Not required.
Environmental Precautions: Do not allow undiluted product to enter sewer/surface or ground water.
Emergency Procedures: Evacuate personnel to safe areas and follow emergency response protocols.
Methods and Materials for Containment and Cleaning Up: Use inert absorbent material to soak up spill.
See section 7 for information on safe handling.
See section 8 for information on PPE.
See section 13 for disposal information.

Section 7: Handling and Storage
Precautions for Safe Handling: Provide appropriate exhaust ventilation at places where dust is formed. Conditions for Safe Storage: Store at 2-8°C. Keep container tightly closed in a dry, well-ventilated place.
Incompatible Products: N/A

Section 8: Exposure Controls and Personal Protection
Appropriate Engineering Controls: General industrial hygiene practice.
Recommendations for Personal Protective Measures:
Hand Protection: The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
Material of gloves: The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material cannot be calculated in advance and has therefore to be checked prior to the application.
Eye Protection: N/A
Skin and Body Protection: Wear appropriate laboratory attire when handling this product, such as gloves, long pants, closed-toe shoes and a laboratory coat.
Respiratory Protection: N/A
Hygiene Measures: Avoid contact with eyes, skin and clothing. Wash hands thoroughly after using this product.
Special Requirements for Personal Protective Equipment, Protective Clothing, Respirators, etc: N/A
Components with Workplace Control Parameters: N/A

Section 9: Physical and Chemical Properties
Appearance:
Form: Liquid
Color: Clear
Odor: Odorless
Odor Threshold: No data available
pH: No data available
Melting Point/Freezing Point: No data available
Initial Boiling Point/Boiling Range: No data available
Flash Point: No data available
Evaporation Rate: No data available
Flammability (Solid, Gas): No data available
Upper/Lower Limits on Flammability and Explosive Limits:
Flammability Limit (Upper): No data available
Flammability Limit (Lower): No data available
Explosive Limit (Upper): No data available
Explosive Limit (Lower): No data available
Vapor Pressure: No data available
Vapor Density: No data available
Relative Density: No data available
Solubility:
Solubility in Water: Not miscible or difficult to mix.
Solubility (Other): No data available
Partition Coefficient (n-octanol/ water): No data available
Auto-Ignition Temperature: No data available
Decomposition Temperature: No data available
Viscosity: No data available

Section 10: Stability and Reactivity Data
Reactivity: No data available
Chemical Stability: No data available
Possibility of Hazardous Reactions: Conditions to Avoid: No data available
Materials to Avoid: No data available
Hazardous Decomposition Products: Carbon monoxide, Carbon dioxide, Sulfur oxides, Sodium oxides.

Section 11: Toxicological Information
Information on Likely Routes of Exposure:
Inhalation: No data available
Ingestion: No data available
Skin: No irritant effect.
Eyes: No irritant effect.
Information on Toxicological Effects:
Acute Toxicity:
Oral LD50: No data available
Inhalation LC50: No data available
Dermal LD50: No data available
Other Information: No data available
Skin Corrosion/Irritation: No data available
Serious Eye Damage/Irritation: No data available
Respiratory or Skin Sensitization: No data available
Germ Cell Mutagenicity: No data available
Carcinogenicity:
IARC: No component of this product that is present at 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
ACGIH: No component of this product that is present at 0.1% is identified as probable, possible or confirmed human carcinogen by ACGIH.
NTP: No component of this product that is present at 0.1% is identified as probable, possible or confirmed human carcinogen by NTP.
OSHA: No component of this product that is present at 0.1% is identified as probable, possible or confirmed human carcinogen by OSHA.
Reproductive Toxicity: No data available
Teratogenicity: No data available
Specific Target Organ Toxicity –
Single Exposure: No data available
Specific Target Organ Toxicity – Repeated Exposures: No data available
Aspiration Hazard: No data available
Signs and Symptoms of Exposure: The sodium salt of dodecyl sulfate has been reported to cause pulmonary sensitization resulting in hyperactive airway. Dysfunction and pulmonary allergy accompanied by fatigue, malaise, and aching. Significant symptoms of exposure can persist for more than two years and can be activated by a variety of
nonspecific environmental stimuli such as automobile. Exhaust, perfumes, and passive smoking. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Synergistic Effects: No data available
Additional Information: No data available

Section 12: Ecological Information
- Toxicity: No known significant effects or critical hazards.
- Persistence and Degradability: No data available
- Bioaccumulative Potential: No data available
- Mobility in Soil: No data available
- PBT and vPvB Assessment: No data available
- Other Adverse Effects: N/A
- General notes: N/A

Section 13: Disposal Considerations
Dispose unused material. Observe regulations.

Section 14: Transport Information
- DOT: Not regulated.
- IMDG: Not regulated.
- IATA: Not regulated.

Section 15: Other Regulatory Information
SARA 302 Components
No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components
This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards
No SARA Hazards

Massachusetts Right To Know Components: N/A
Pennsylvania Right To Know Components: N/A
New Jersey Right To Know Components: N/A
California Prop. 65 Components
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

Section 16: Other Information
References: Not available. Other Special Considerations: Not available.

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SAFETY DATA SHEET: Proximo Hi-C (Microbe) Kit

Quenching Solution

Section 1: Chemical Information
Product Name: Quenching Solution
Identified uses: Laboratory chemicals, Synthesis of substances
Supplier: Phase Genomics, 1617 8th Ave N, Seattle, WA 98109, 1-833-742-7436

Section 2: Composition and Information on Ingredients
Hazard Classification
Health Hazards: No known OSHA hazards
Not a dangerous substance according to GHS
GHS Label Element
Hazard Symbol: N/A
Hazard Statements: Not a hazardous substance or mixture.

Section 3: Hazard Identification
Substance or Mixture: Mixture of non-hazardous substances.

Section 4: First Aid Measures
General Advice: Wear protective gloves/protective clothing/eye protection/face protection.
If Inhaled: If not breathing, give artificial respiration.
In Case of Skin Contact: Wash with soap and water.
In Case of Eye Contact: Remove contact lenses, if present and easy to do. Continue rinsing.
If Swallowed: N/A
Most Important Symptoms and Effects, Acute and Delayed: N/A
Recommendations for Immediate Medical Attention and Special Treatment: Treat symptomatically. Symptoms may be delayed.

Section 5: Fire and Explosion Data
Conditions of Flammability: Not flammable or combustible.
Suitable Extinguishing Media: Dry powder, CO2, water spray or regular foam.
Special Protective Equipment for Firefighters: Wear self-contained breathing apparatus, if necessary.
Hazardous Combustion Products: Further Information: N/A
Further information: N/A

Section 6: Accidental Release Measures
Personal Precautions: Avoid dust formation. Avoid breathing vapors. See Section 8: Exposure Controls/ Personal Protection for more information.
Environmental Precautions: Do not allow undiluted product to enter sewer/surface or ground water.
Emergency Procedures: Evacuate personnel to safe areas and follow emergency response protocols.
Methods and Materials for Containment and Cleaning Up: Use inert absorbent material to soak up spill.

Section 7: Handling and Storage
Precautions for Safe Handling: Provide appropriate exhaust ventilation at places where dust is formed. Conditions for Safe Storage: Store at 2-8°C. Keep container tightly closed in a dry, well-ventilated place.
Incompatible Products: N/A

Section 8: Exposure Controls and Personal Protection
Appropriate Engineering Controls: General industrial hygiene practice.
Recommendations for Personal Protective Measures:
Hand Protection: Use gloves when handling this product. Inspect gloves prior to use for any visible damage. Use proper glove removal technique to prevent contact with skin. Dispose of gloves in accordance with applicable laws. Wash and dry hands after use.
Eye Protection: N/A
Skin and Body Protection: Wear appropriate laboratory attire when handling this product, such as gloves, long pants, closed-toe shoes and a laboratory coat.
Respiratory Protection: N/A
Hygiene Measures: Avoid contact with eyes, skin and clothing. Wash hands thoroughly after using this product.
Special Requirements for Personal Protective Equipment, Protective Clothing, Respirators, etc: N/A
Components with Workplace Control Parameters: N/A

Section 9: Physical and Chemical Properties
Appearance:
Form: Liquid
Color: Clear
Odor: No data available
Odor Threshold: No data available
SAFETY DATA SHEET: Proximo Hi-C (Microbe) Kit

Section 9: Physical and Chemical Properties

- pH: No data available
- Melting Point/Freezing Point: No data available
- Initial Boiling Point/Boiling Range: No data available
- Flash Point: No data available
- Evaporation Rate: No data available
- Flammability (Solid, Gas): No data available
- Upper/Lower Limits on Flammability and Explosive Limits:
  - Flammability Limit (Upper): No data available
  - Flammability Limit (Lower): No data available
  - Explosive Limit (Upper): No data available
  - Explosive Limit (Lower): No data available
- Vapor Pressure: No data available
- Vapor Density: No data available
- Relative Density: No data available
- Solubility:
  - Solubility in Water: No data available
  - Solubility (Other): No data available
  - Partition Coefficient (n-octanol/ water): No data available
- Auto-Ignition Temperature: No data available
- Decomposition Temperature: No data available
- Viscosity: No data available

Section 10: Stability and Reactivity Data

- Reactivity: No data available
- Chemical Stability: No data available
- Possibility of Hazardous Reactions: Conditions to Avoid: No data available
- Materials to Avoid: No data available
- Hazardous Decomposition Products: No data available

Section 11: Toxicological Information

Information on Likely Routes of Exposure:
- Inhalation: No data available
- Ingestion: No data available
- Skin: No data available
- Eyes: No data available

Information on Toxicological Effects:
- Acute Toxicity:
  - Oral LD50: No data available
  - Inhalation LC50: No data available
  - Dermal LD50: No data available
- Other Information: No data available
- Skin Corrosion/Irritation: No data available
- Serious Eye Damage/Irritation: No data available
- Respiratory or Skin Sensitization: No data available
- Germ Cell Mutagenicity: No data available

Carcinogenicity:
- IARC: No component of this product that is present at 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
- ACGIH: No component of this product that is present at 0.1% is identified as probable, possible or confirmed human carcinogen by ACGIH.
- NTP: No component of this product that is present at 0.1% is identified as probable, possible or confirmed human carcinogen by NTP.
- OSHA: No component of this product that is present at 0.1% is identified as probable, possible or confirmed human carcinogen by OSHA.

Reproductive Toxicity: No data available
- Teratogenicity: No data available
- Specific Target Organ Toxicity – Single Exposure: No data available
- Specific Target Organ Toxicity – Repeated Exposures: No data available
- Aspiration Hazard: No data available
- Signs and Symptoms of Exposure: No data available
- Synergistic Effects: No data available
- Additional Information: No data available

Section 12: Ecological Information
SAFETY DATA SHEET: Proximo Hi-C (Microbe) Kit

Toxicity: No known significant effects or critical hazards.
Persistence and Degradability: No data available
Bioaccumulative Potential: No data available
Mobility in Soil: No data available
PBT and vPvB Assessment: N/A

Section 13: Disposal Considerations
Contaminated Packaging:
Disposal must be made according to official regulations.

Section 14: Transport Information
DOT: Not regulated.
IMDG: Not regulated.
IATA: Not regulated.

Section 15: Other Regulatory Information
SARA 302 Components
No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
SARA 313 Components
This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.
SARA 311/312 Hazards
No SARA Hazards
Massachusetts Right To Know Components
No components are subject to the Massachusetts Right to Know Act.
Pennsylvania Right To Know Components
Glycine CAS-No. 56-40-6
New Jersey Right To Know Components
Glycine CAS-No. 56-40-6
California Prop. 65 Components
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

Section 16: Other Information
References: Not available. Other Special Considerations: Not available.
Last Updated: 07/06/2018 12:00 PM
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RX Enzyme

Section 1: Chemical Information
Product Name: RX Enzyme
Supplier: Phase Genomics, 1617 8th Ave N, Seattle, WA 98109, 1-833-742-7436
Recommended Use: reagent

Section 2: Composition and Information on Ingredients
There are no substances at their given concentration, are considered to be hazardous to health.

Section 3: Hazard Identification
Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)
HNOC: No Data available
Label Elements:
- Appearance: Colorless
- Physical State: Liquid
- Odor: Mild
Other information
2.19 % of the mixture consists of ingredient(s) of unknown toxicity

Section 4: First Aid Measures
General advice
The product contains no substances which at their given concentration, are considered to be hazardous to health. Immediate medical attention is required. In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). Remove from exposure, lie down. Do not breathe dust/fume/gas/mist/vapors/spray.

Eye contact
Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.

Skin contact
Wash skin with soap and water.

Inhalation
Remove to fresh air.

Ingestion
Clean mouth with water and drink afterwards plenty of water.

Most important symptoms and effects, both acute and delayed
No information available.
Indication of any immediate medical attention and special treatment needed.
Note to physicians: Treat symptomatically.

Section 5: Fire and Explosion Data
Suitable extinguishing media
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media
CAUTION: Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the chemical
No information available.

Protective equipment and precautions for firefighters
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

Section 6: Accidental Release Measures
Personal precautions
Ensure adequate ventilation, especially in confined areas.

Personal protective equipment (PPE)
Use personal protection recommended in Section 8.

Environmental precautions
See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up
Prevent further leakage or spillage if safe to do so.

Methods for cleaning up
Soak up with inert absorbent material. Pick up and transfer to properly labeled containers. This material and its container must be disposed of as hazardous waste.

Section 7: Handling and Storage
Precautions for safe handling
Handle in accordance with good industrial hygiene and safety practice.
SAFETY DATA SHEET: Proximo Hi-C (Microbe) Kit

Conditions for safe storage, including any incompatibilities

Storage temperature
Keep at -20 degrees Celsius.

Storage Conditions
Keep/store only in original container.

Incompatible materials
None known based on information supplied.

Section 8: Exposure Controls and Personal Protection

Exposure Guidelines
This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Other information
Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Appropriate engineering controls
Showers. Eyewash stations.

Individual protection measures, such as personal protective equipment Eye/face protection
Wear safety glasses with side shields (or goggles).

Skin and body protection
Wear suitable protective clothing and gloves.

Respiratory protection
Use in well ventilated areas.

General hygiene considerations
Handle in accordance with good industrial hygiene and safety practice.

Section 9: Physical and Chemical Properties

Physical State: Form: Liquid
Color: Clear or colorless
Odor: None

Section 10: Stability and Reactivity Data

Reactivity: No data available.
Chemical Stability: Stable under normal conditions

Possibility of Hazardous Reactions: Can react briskly with oxidizers- danger of explosion.
Conditions to Avoid: Incompatible materials, ignition sources, heat.
Incompatible Materials: Strong oxidizing agents
Hazardous Decomposition Products: Thermal decomposition can lead to release of irritating and toxic gases and vapors. Carbon monoxide. Carbon dioxide (CO2).

Section 11: Toxicological Information

Information on likely routes of exposure

Inhalation
Avoid breathing vapors or mists. May cause irritation of respiratory tract.

Eye contact
Redness. May cause slight irritation.

Skin contact
Prolonged contact may cause redness and irritation. Repeated exposure may cause skin dryness or cracking.

Ingestion
May cause drowsiness or dizziness. Ingestion causes burns of the upper digestive and respiratory tracts. Symptoms include burning sensation, coughing, wheezing, shortness of breath, headache, nausea, and vomiting.

Section 12: Ecological Information

Ecotoxicity
2.19 % of the mixture consists of component(s) of unknown hazards to the aquatic environment.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Algae/aquatic plants</th>
<th>Fish</th>
<th>Crustacea</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glycerol 56-81-5</td>
<td>-</td>
<td>51 - 57: 96 Oncorhynchus mykiss mL/L LC50 static</td>
<td>500: 24 h Daphnia magna mg/L EC50</td>
</tr>
<tr>
<td>Calcium Chloride</td>
<td>10043-52-4</td>
<td>10650: 96 Lepomis macrochirus mg/L LC50 static</td>
<td>2400: 48 h Daphnia magna mg/L LC50</td>
</tr>
</tbody>
</table>

All other data unavailable
Section 13: Disposal Considerations

Waste treatment methods

Relevant Information

Keep out of drains, sewers, ditches and waterways.

Disposal considerations

Use a licensed professional waste disposal service to dispose of this product. Product may be dissolved in a combustible solvent or absorbed onto a combustible material and burned by a chemical incinerator.

Contaminated packaging

Empty containers must be tripled rinsed prior to disposal.

Section 14: Transport Information

This product is not dangerous and no special precautions are needed according to DOT, ADR/RID (cross border), IMDG and IATA/ICAO.

Section 15: Other Regulatory Information

International Inventories

TSCA: Complies

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

US Federal Regulations

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

U.S. EPA Label Information

EPA Pesticide Registration Number: Not applicable

Section 16: Other Information

References: Not available. Other Special Considerations: Not available.

Last Updated: 07/06/2018 12:00 PM

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Recovery Beads

Section 1: Chemical Information
Product Name: Recovery Beads
Supplier: Phase Genomics, 1617 8th Ave N, Seattle, WA 98109, 1-833-742-7436

Section 2: Composition and Information on Ingredients
Chemical characterization: Mixtures
Description: The product is a mixture of the hazardous substances listed below along with unlisted nonhazardous substances.
Dangerous components: Void
Additional information: For the wording of the listed risk phrases refer to section 15.

Section 2: Hazard Identification
Substance or Mixture: The product is not classified as hazardous according to the Globally Harmonized System (GHS).
Synonyms/Common Names: N/A
GHS label elements: Void
Hazard pictograms: Void
Signal word: Void
Hazard statements: Void
Classification system:
NFPA ratings (scale 0 - 4)
Health = 0
Fire = 0
Reactivity = 0
HMIS-ratings (scale 0 - 4)
Health = 0
Fire = 0
Reactivity = 0
OSHA Hazard Overview (Criteria according to 29CFR1910.1200): Not applicable
Target Organ(s): Not applicable or unknown
Other hazards
This mixture has not been tested to determine the overall health hazard; therefore in accordance with 29CFR1910.1200, the data reported above pertains to the hazardous ingredients of this mixture.
Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.

Section 4: First Aid Measures
Description of first aid measures
General information: No special measures required.
After inhalation: If the patient feels unwell or is concerned, obtain medical advice.
After skin contact: Generally the product does not irritate the skin.
After eye contact: Rinse opened eye for several minutes under running water.
After swallowing: If the patient feels unwell or is concerned, obtain medical advice.
Information for doctor:
Most important symptoms and effects, both acute and delayed: Dizziness
Indication of any immediate medical attention and special treatment needed: No further relevant information available.

Section 5: Fire and Explosion Data
Conditions of Flammability: Not flammable or combustible.
Suitable Extinguishing Media: Dry powder, CO2, water spray or regular foam.
Special Protective Equipment for Firefighters: No special measures required.
Hazardous Combustion Products: N/A

Section 6: Accidental Release Measures
Personal precautions, protective equipment and emergency procedures: not required.
Environmental precautions: Do not allow to enter sewers/ surface or ground water.
Methods and material for containment and cleaning up: Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Reference to other sections
See Section 7 for information on safe handling.
See Section 13 for disposal information.
Section 7: Handling and Storage
Handling:
- **Precautions for safe handling:** No special measures required.
- **Information about protection against explosions and fires:** The product is not flammable.
- **Conditions for safe storage, including any incompatibilities**

Storage:
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.
- **Specific end use(s):** No further relevant information available.

Section 8: Exposure Controls and Personal Protection

Control parameters
- **Components with limit values that require monitoring at the workplace:** The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** The lists that were valid during the creation were used as basis.

Exposure controls
- **Personal protective equipment:**
  - **General protective and hygienic measures:** The usual precautionary measures for handling chemicals should be followed.
  - **Breathing equipment:** Not required.
  - **Protection of hands:** Not required.
  - **Material of gloves:** The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
  - **Eye protection:** Not required.

Section 9: Physical and Chemical Properties

**Appearance:**
- **Form:** Liquid, with precipitates
- **Color:** Brown
- **Odor:** No data available
- **Odor Threshold:** No data available
- **pH:** No data available

**Melting Point/Freezing Point:** No data available

**Initial Boiling Point/Boiling Range:** 100 °C (212 °F)

**Flash Point:** No data available

**Evaporation Rate:** No data available

**Flammability (Solid, Gas):** No data available

**Upper/Lower Limits on Flammability and Explosive Limits:**
- **Flammability Limit (Upper):** No data available
- **Flammability Limit (Lower):** No data available
- **Explosive Limit (Upper):** No data available
- **Explosive Limit (Lower):** No data available

**Vapor Pressure:** No data available

**Vapor Density:** No data available

**Relative Density:** No data available

**Solubility:**
- **Solubility in Water:** Not miscible or difficult to mix.
- **Solubility (Other):** No data available
- **Partition Coefficient (n-octanol/ water):** No data available

**Auto-Ignition Temperature:** No data available

**Decomposition Temperature:** No data available

**Viscosity:**
- **Dynamic:** Not determined.
- **Kinematic:** Not determined.
- **Water:** 90.6 %
- **VOC content:** 0.00 %

**Solids content:** 34.1 %

**Other information:** No further relevant information available.

Section 10: Stability and Reactivity Data
SAFETY DATA SHEET: Proximo Hi-C (Microbe) Kit

Reactivity: No data available
Chemical Stability: No data available
Possibility of Hazardous Reactions: No dangerous reactions known.
Conditions to Avoid: No data available
Materials to Avoid: No data available
Hazardous Decomposition Products: No data available

Section 11: Toxicological Information
Information on Likely Routes of Exposure:
- Inhalation: No data available
- Ingestion: No data available
- Skin: No data available
- Eyes: No data available

Information on Toxicological Effects:
Acute Toxicity:
- Oral LD50: No data available
- Inhalation LC50: No data available
- Dermal LD50: No data available

Other Information: No data available
Skin Corrosion/Irritation: No irritant effect.
Serious Eye Damage/Irritation: Irritating effect.
Respiratory or Skin Sensitization: No data available
Germ Cell Mutagenicity: No data available
Carcinogenicity:
- IARC: None of the ingredients are listed.
- NTP: None of the ingredients are listed.
- OSHA: None of the ingredients are listed.
Reproductive Toxicity: No data available

Additional Information: The product is not subject to classification according to internally approved calculation methods for preparations. When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

Section 12: Ecological Information
Toxicity
Aquatic toxicity: Not harmful to the aquatic environment
Persistence and degradability: Not available
Behavior in environmental systems:
- Bioaccumulative potential: Not known
- Mobility in soil: No further relevant information available.
Ecological effects:
- Remark: Not available
- Additional ecological information:

General notes:
Water hazard class 1 (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.
Other adverse effects No further relevant information available.

Section 13: Disposal Considerations
Product:
Disposal should be in accordance with applicable regional, national and local laws and regulations.
Refer to Section 7: Handling and Storage and Section 8: Exposure Control/ Personal Protection for additional handling information and protection of employees.
Contaminated Packaging:
Disposal must be made according to official regulations.

Section 14: Transport Information
DOT: Not regulated.
IMDG: Not regulated.
IATA: Not regulated.
Section 15: Other Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture

Sara

Section 355 (extremely hazardous substances): None of the ingredients are listed.

Section 313 (Specific toxic chemical listings): None of the ingredients are listed.

TSCA (Toxic Substances Control Act):

- 7647-14-5 sodium chloride
- 1185-53-1 2-Amino-2-(hydroxymethyl)-1,3-propanediolhydrochloride
- 7732-18-5 water

Proposition 65

Chemicals known to cause cancer: None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for females: None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for males: None of the ingredients are listed.

Chemicals known to cause developmental toxicity: None of the ingredients are listed.

Cancerogenity categories

EPA (Environmental Protection Agency): None of the ingredients are listed.

TLV (Threshold Limit Value established by ACGIH):

- 26628-22-8 sodium azide A4

NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients are listed.

GHS label elements Void

Signal word Void

Hazard statements Void

National regulations:

- Water hazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.
- Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

Section 16: Other Information

References: Not available. Other Special Considerations: Not available.

Last Updated: 02/07/2020 4:00 PM

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Recovery Wash Concentrate

Section 1: Chemical Information
Product Name: Recovery Wash Concentrate
Supplier: Phase Genomics, 1617 8th Ave N, Seattle, WA 98109, 1-833-742-7436
Recommended use: reagent

Section 2: Composition and Information on Ingredients
Chemical characterization: Mixtures
Description: The product is a mixture of the hazardous substances listed below along with unlisted nonhazardous substances. The exact concentration percentages of the hazardous substances may be withheld as a Promega Corp. trade secret.
Dangerous components: Void
Additional information: For the wording of the listed risk phrases refer to section 15.

Section 3: Hazard Identification
Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

Section 4: First Aid Measures
General advice
The product contains no substances which at their given concentration, are considered to be hazardous to health. In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). Remove from exposure, lie down. Do not breathe dust/fume/gas/mist/vapors/spray.
Eye contact
Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
Skin contact
Wash skin with soap and water.
Inhalation
If the patient feels unwell or is concerned, obtain medical advice.
Ingestion
If the patient feels unwell or is concerned, obtain medical advice.
Most important symptoms and effects, both acute and delayed
Dizziness
Indication of any immediate medical attention and special treatment needed
Note to physicians: Treat symptomatically.

Section 5: Fire and Explosion Data
Conditions of Flammability: Not flammable or combustible.
Suitable Extinguishing Media: Dry powder, CO2, or water spray.
Special Protective Equipment for Firefighters: No special advice
Hazardous Combustion Products: None known
Further Information: N/A
Further information: N/A

Section 6: Accidental Release Measures
Personal precautions
No known health hazards
Personal protective equipment [PPE]
Use personal protection recommended in Section 8.
Environmental precautions
See Section 12 for additional Ecological Information.
Methods and material for containment and cleaning up Methods for containment Dilute with plenty of water.
Methods for cleaning up Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Reference to other sections
No dangerous substances are released.
See Section 7 for information on safe handling.
See Section 13 for disposal information.

Section 7: Handling and Storage
Precautions for safe handling
Handle in accordance with good industrial hygiene and safety practice.
Information about protection against explosions and fires: The product is not flammable.

Conditions for safe storage, including any incompatibilities

Storage:

Requirements to be met by storerooms and receptacles: No special requirements.

Information about storage in one common storage facility: Not required.

Further information about storage conditions: None.

Section 8: Exposure Controls and Personal Protection

Control parameters

Components with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

Additional information: The lists that were valid during the creation were used as basis.

Exposure controls

Personal protective equipment:

General protective and hygienic measures: The usual precautionary measures for handling chemicals should be followed.

Breathing equipment: Not required.

Protection of hands: Not required.

Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Eye protection: Not required.

Section 9: Physical and Chemical Properties

Physical State: Form: Liquid

Color: Clear or colorless

Odor: None

pH-value at 20 °C (68 °F): 5

Melting point/ Melting range: 0 °C (32 °F)

Boiling point/ Boiling range: 100 °C (212 °F)

Flash point: Not applicable.

Flammability (solid, gaseous): Not applicable.

Ignition temperature:

Decomposition temperature: Not determined.

Auto igniting: Product is not selfigniting.

Danger of explosion: Product does not present an explosion hazard

Explosion limits:

Lower: Not determined.

Upper: Not determined.

Vapor pressure: Not determined.

Density: Not determined.

Relative density Not determined.

Vapor density Not determined.

Evaporation rate Not determined.

Solubility in / Miscibility with Water: Fully miscible.

Partition coefficient (n-octanol/water): Not determined.

Viscosity:

Dynamic: Not determined.

Kinematic: Not determined.

Organic solvents: 0.1 %

Water: 99.5 %

VOC content: 0.11 %

Solids content: 0.5 %

Other information No further relevant information available.

Section 10: Stability and Reactivity Data

Reactivity No further relevant information available.

Chemical stability

Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

Possibility of hazardous reactions No dangerous reactions known.
SAFETY DATA SHEET: Proximo Hi-C (Microbe) Kit

Conditions to avoid: No further relevant information available.
Incompatible materials: No further relevant information available.
Hazardous decomposition products: No dangerous decomposition products known.

Section 11: Toxicological Information
Low hazard for usual industrial or commercial handling by trained personnel
LD/LC50 values that are relevant for classification: No data available
Eye contact
Irritating effect.

Skin contact
No irritant effect.

Ingestion
No harmful effects expected in amounts likely to be ingested by accident.
Skin corrosion/irritation: Not Classified
Serious eye damage/eye irritation: Not Classified
Sensitization: Not Classified
Germ cell mutagenicity: Not Classified
Carcinogenicity: This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.

Section 12: Ecological Information
Toxicity
Aquatic toxicity: Not harmful to the aquatic environment
Persistence and degradability: Not available
Behavior in environmental systems:
Bioaccumulative potential: Not known
Mobility in soil: No further relevant information available.
Ecotoxicological effects:
Remark: Not available

Additional ecological information:
General notes: Generally not hazardous for water.

Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.
Other adverse effects: No further relevant information available.

Section 13: Disposal Considerations
Waste treatment methods
Recommendation:
Disposal should be in accordance with applicable regional, national and local laws and regulations.
Refer to Section 7: Handling and Storage and Section 8: Exposure Control/Personal Protection for additional handling information and protection of employees.
Uncleaned packagings:
Recommendation: Disposal must be made according to official regulations.
Recommended cleansing agent: Water, if necessary with cleansing agents.

Section 14: Transport Information
This product is not dangerous and no special precautions are needed according to DOT, ADR/RID (cross border), IMDG and IATA/ICAO.

Section 15: Other Regulatory Information
Safety, health and environmental regulations/legislation specific for the substance or mixture
Sara Section 355 (extremely hazardous substances):
None of the ingredients are listed.
Section 313 (Specific toxic chemical listings):
None of the ingredients are listed.
TSCA (Toxic Substances Control Act):
All ingredients are listed.
Proposition 65
Chemicals known to cause cancer:
None of the ingredients are listed.
Chemicals known to cause reproductive toxicity for females:
None of the ingredients are listed.
Chemicals known to cause reproductive toxicity for males:
None of the ingredients are listed.

Chemicals known to cause developmental toxicity:
None of the ingredients are listed.

Cancerogenity categories
EPA (Environmental Protection Agency)
None of the ingredients are listed.

TLV (Threshold Limit Value established by ACGIH)
None of the ingredients are listed.

NIOSH-Ca (National Institute for Occupational Safety and Health)
None of the ingredients are listed.

GHS label elements Void
Signal word Void
Hazard statements Void

National regulations:
Water hazard class: Generally not hazardous for water.

Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

Section 16: Other Information

References: Not available. Other Special Considerations: Not available.

Last Updated: 02/07/2018 4:00 PM

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Stop Solution

Section 1: Chemical Information
Product Name: Stop Solution
Supplier: Phase Genomics, 1617 8th Ave N, Seattle, WA 98109, 1-833-742-7436
Recommended Use: reagent

Section 2: Composition and Information on Ingredients

Hazard Classification
Health Hazards: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Hazard Symbol: N/A

Section 3: Hazard Identification

GHS Classification OSHA Regulatory Status
This chemical is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Signal Word: Warning

Hazard statements
Causes respiratory tract, eye and skin irritation. Avoid breathing vapor or mist. Avoid contact with eyes, skin, and clothing. Use only with adequate ventilation. Keep container tightly closed and sealed until ready for use. Wash thoroughly after handling.

Physical state: Liquid

Potential Acute Health Effects:
INHALATION: irritating to respiratory system. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure. INGESTION: No known significant effects or critical hazards. SKIN: irritating to skin. EYES: irritating to eyes.

Potential Chronic Health Effects:
CARCINOGENICITY: No known significant effects or critical hazards. MUTAGENICITY: No known significant effects or critical hazards. TERATOGENICITY: No known significant effects or critical hazards. DEVELOPMENT EFFECTS: No known significant effects or critical hazards. FERTILITY EFFECTS: No known significant effects or critical hazards. MEDICAL CONDITIONS AGGRAVATED BY OVEREXPOSURE: None known.

Section 4: First Aid Measures

In Case of Skin Contact: Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothes and shoes. Wash clothes before reuse. Clean shoes thoroughly before reuse. Get medical attention immediately.

In Case of Eye Contact: Remove contact lenses, if present and easy to do. Flush eyes with plenty of water for at least 15 minutes, making sure to occasionally flush upper and lower eyelids. Get medical attention immediately.

If Swallowed: Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.

Section 5: Fire and Explosion Data

Conditions of Flammability: If heated, a pressure increase will occur and the container may burst.
Suitable Extinguishing Media: Dry powder, CO2, water spray or regular foam.
Special Protective Equipment for Firefighters: Wear self-contained breathing apparatus with a full face-piece operated in positive pressure mode.
Hazardous Combustion Products: Further Information: N/A
Further information: N/A

Section 6: Accidental Release Measures

Personal Precautions: Do not walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see section 8).
Environmental Precautions: Do not allow undiluted product to enter sewer/surface or soil or ground water. Inform relevant authorities if product has caused environmental pollution.
Emergency Procedures: Evacuate personnel to safe areas and follow emergency response protocols.
Methods and Materials for Containment and Cleaning Up: Use inert absorbent material to soak up spill. Prevent further leakage or spillage if safe to do so.

See section 7 for information on safe handling.
See section 8 for information on PPE.
See section 13 for disposal information.

Section 7: Handling and Storage

Precautions for Safe Handling: Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Provide appropriate exhaust ventilation.
Keep tightly closed when not in use. Keep container tightly closed in a dry, well-ventilated place and out of direct sunlight.
Section 8: Exposure Controls and Personal Protection

Appropriate Engineering Controls: General industrial hygiene practice.

Recommendations for Personal Protective Measures:

Hand Protection: The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

Material of gloves: The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material cannot be calculated in advance and has therefore to be checked prior to the application.

Eye Protection: Safety eyewear complying with an approved standard should be used.

Skin and Body Protection: Wear appropriate laboratory attire when handling this product, such as gloves, long pants, closed-toe shoes and a laboratory coat.

Respiratory Protection: N/A

Hygiene Measures: Avoid contact with eyes, skin and clothing. Wash hands thoroughly after using this product.

Special Requirements for Personal Protective Equipment, Protective Clothing, Respirators, etc: N/A

Components with Workplace Control Parameters: N/A

Section 9: Physical and Chemical Properties

Appearance:
Form: Liquid
Color: Clear to light yellow

Odor: No data available

Odor Threshold: No data available

pH: No data available

Melting Point/Freezing Point: No data available

Initial Boiling Point/Boiling Range: No data available

Flash Point: No data available

Evaporation Rate: No data available

Flammability (Solid, Gas): No data available

Vapor Pressure: No data available

Vapor Density: No data available

Relative Density: No data available

Section 10: Stability and Reactivity Data

Reactivity: No data available

Chemical Stability: This product is stable.

Possibility of Hazardous Reactions: Under normal conditions of storage and use, hazardous reactions will not occur.

Materials to Avoid: No data available

Hazardous Decomposition Products: Under normal conditions of storage and use, no hazardous decomposition products will be produced.

Section 11: Toxicological Information

Acute toxicity:

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Oral LD50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethylenediaminetetraacetic acid</td>
<td>~30 mg/kg (mouse)</td>
</tr>
</tbody>
</table>

Carcinogenicity: No known significant effects or critical hazards.

Mutagenicity: No known significant effects or critical hazards.

Teratogenicity: No known significant effects or critical hazards.

Section 12: Ecological Information

Toxicity: No known significant effects or critical hazards.

Persistence and Degradability: No data available

Bioaccumulative Potential: No data available

Mobility in Soil: No data available
PBT and vPvB Assessment: No data available

Section 13: Disposal Considerations
Dispose unused material. Observe regulations.

Section 14: Transport Information
DOT: Not regulated.
IMDG: Not regulated.
IATA: Not regulated.

Section 15: Other Regulatory Information
HCS classification
Irritating material
SARA 302 Components
No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
SARA 313 Components
This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.
SARA 311/312 Hazards
No SARA Hazards
Massachusetts Right To Know Components: N/A
Pennsylvania Right To Know Components: N/A
New Jersey Right To Know Components: N/A
California Prop. 65 Components
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

Section 16: Other Information
References: Not available. Other Special Considerations: Not available.
Last Updated: 07/06/2018 12:00 PM
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Streptavidin Beads

Section 1: Chemical Information
Product Name: Streptavidin Beads
Supplier: Phase Genomics, 1617 8th Ave N, Seattle, WA 98109, 1-833-742-7436
Recommended use: reagent

Section 2: Composition and Information on Ingredients
Hazard Classification
Health Hazards: No known OSHA hazards
Not a dangerous substance according to GHS
GHS Label Element
Hazard Symbol: N/A
Hazard Statements: Not a hazardous substance or mixture.

Section 3: Hazard Identification
Substance or Mixture: Mixture of non-hazardous substances.
Synonyms/Common Names: N/A
Chemical Name: Sodium azide
Cas No.: 26628-22-8
Concentration: 0.05%

Section 4: First Aid Measures
General Advice: Wear protective gloves/protective clothing/eye protection/face protection.
If Inhaled: If not breathing, give artificial respiration.
In Case of Skin Contact: Wash with soap and water.
In Case of Eye Contact: Remove contact lenses, if present and easy to do. Continue rinsing.
If Swallowed: N/A
Most Important Symptoms and Effects, Acute and Delayed: N/A
Recommendations for Immediate Medical Attention and Special Treatment: Treat symptomatically. Symptoms may be delayed.

Section 5: Fire and Explosion Data
Conditions of Flammability: Not flammable or combustible.
Suitable Extinguishing Media: Dry powder, CO2, water spray or regular foam.
Special Protective Equipment for Firefighters: Wear self-contained breathing apparatus, if necessary.
Hazardous Combustion Products: Further Information: N/A
Further information: Prevent fire fighting water from entering surface water or groundwater.

Section 6: Accidental Release Measures
Personal Precautions: Avoid inhalation of vapors or mist. See Section 8: Exposure Controls/ Personal Protection for more information.
Environmental Precautions: Do not allow undiluted product to enter sewer/surface or ground water.
Emergency Procedures: Evacuate personnel to safe areas and follow emergency response protocols.
Methods and Materials for Containment and Cleaning Up: Use inert absorbent material to soak up spill.

Section 7: Handling and Storage
Precautions for Safe Handling: Handle in accordance with good chemical hygiene and safety practices. Protect from moisture. Avoid contact with eyes, skin and clothing. Avoid inhalation of vapors or mist.
Conditions for Safe Storage: Store at 2-8°C. Keep container tightly closed in a dry, well-ventilated place.
Incompatible Products: N/A

Section 8: Exposure Controls and Personal Protection
Appropriate Engineering Controls: Adequate ventilation and access to eye washing stations are required.
Recommendations for Personal Protective Measures:
Hand Protection: Use gloves when handling this product. Inspect gloves prior to use for any visible damage. Use proper glove removal technique to prevent contact with skin. Dispose of gloves in accordance with applicable laws. Wash and dry hands after use.
Eye Protection: Use a face shield and/or safety goggles when handling this product. Use eyewear that has been approved by NIOSH.
Skin and Body Protection: Wear appropriate laboratory attire when handling this product, such as gloves, long pants, closed-toe shoes and a laboratory coat.
Respiratory Protection: If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be used.
Hygiene Measures: Avoid contact with eyes, skin and clothing. Wash hands thoroughly after using this product. Do not eat, drink or smoke when handling this product.
Special Requirements for Personal Protective Equipment, Protective Clothing, Respirators, etc: N/A
Components with Workplace Control Parameters: N/A
SAFETY DATA SHEET: Proximo Hi-C (Microbe) Kit

Section 9: Physical and Chemical Properties

Appearance:
- Form: Liquid, with precipitates
- Color: Brown
- Odor: No data available
- Odor Threshold: No data available
- pH: No data available

Melting Point/Freezing Point: No data available
Initial Boiling Point/Boiling Range: No data available
Flash Point: No data available
Evaporation Rate: No data available
Flammability (Solid, Gas): No data available

Upper/Lower Limits on Flammability and Explosive Limits:
- Flammability Limit (Upper): No data available
- Flammability Limit (Lower): No data available
- Explosive Limit (Upper): No data available
- Explosive Limit (Lower): No data available

Vapor Pressure: No data available
Vapor Density: No data available
Relative Density: No data available
Solubility:
- Solubility in Water: No data available
- Solubility (Other): No data available
- Partition Coefficient (n-octanol/water): No data available

Auto-Ignition Temperature: No data available
Decomposition Temperature: No data available
Viscosity: No data available

Section 10: Stability and Reactivity Data

Reactivity: No data available
Chemical Stability: No data available
Possibility of Hazardous Reactions: Conditions to Avoid: No data available
Materials to Avoid: No data available
Hazardous Decomposition Products: No data available

Section 11: Toxicological Information

Information on Likely Routes of Exposure:
- Inhalation: No data available
- Ingestion: No data available
- Skin: No data available
- Eyes: No data available

Information on Toxicological Effects:
- Acute Toxicity:
  - Oral LD50: No data available
  - Inhalation LC50: No data available
  - Dermal LD50: No data available

Other Information: No data available
Skin Corrosion/Irritation: No data available
Serious Eye Damage/Irritation: No data available
Respiratory or Skin Sensitization: No data available
Germ Cell Mutagenicity: No data available
Carcinogenicity:
  - IARC: No component of this product that is present at 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
  - ACGIH: No component of this product that is present at 0.1% is identified as probable, possible or confirmed human carcinogen by ACGIH.
  - NTP: No component of this product that is present at 0.1% is identified as probable, possible or confirmed human carcinogen by NTP.
  - OSHA: No component of this product that is present at 0.1% is identified as probable, possible or confirmed human carcinogen by OSHA.

Reproductive Toxicity: No data available
Teratogenicity: No data available
Specific Target Organ Toxicity – Single Exposure: No data available
Specific Target Organ Toxicity – Repeated Exposures: No data available
Aspiration Hazard: No data available
Signs and Symptoms of Exposure: No data available
Synergistic Effects: No data available
Additional Information: No data available

Section 12: Ecological Information
Toxicity: No known significant effects or critical hazards.
Persistence and Degradability: No data available
Bioaccumulative Potential: No data available
Mobility in Soil: No data available
PBT and vPvB Assessment: No data available
Other Adverse Effects: This product contains an environmentally hazardous substance below the cutoff level. Refer to Section 3 for ingredient information. Do not allow undiluted product to enter sewer/surface or ground water.

Section 13: Disposal Considerations
Product:
Disposal should be in accordance with applicable regional, national and local laws and regulations.
Sodium azide preservative may form explosive compounds in metal drain lines. See NIOSH Bulletin: Explosive Azide Hazard (8/16/76). To avoid possible build-up of azide compounds, flush wastepipes with water after the disposal of undiluted reagent. Sodium azide disposal must be in accordance with appropriate local regulations.
Refer to Section 7: Handling and Storage and Section 8: Exposure Control/ Personal Protection for additional handling information and protection of employees.
Contaminated Packaging:
Disposal must be made according to official regulations.

Section 14: Transport Information
DOT: Not regulated.
IMDG: Not regulated.
IATA: Not regulated.

Section 15: Other Regulatory Information
SARA 302/304:
SARA 302 TPQ:
Name: Sodium azide
%: 0.05
EHS Yes
(lbs) 500
(gallons) -
SARA 304 RQ:
(lbs) 1,000
(gallons) -
SARA 304 RQ:
2,000,000 lbs / 908,000 kg
SARA 313 Components:
Sodium azide is subject to reporting requirements of Section 313, Title III of SARA. 1.0% de minimis concentration.
SARA 311/312 Hazards:
N/A
US State Regulations:
California Prop. 65: No ingredient regulated by CA Prop 65 present.
Massachusetts RTK: Sodium azide CAS No. 26628-22-8
New Jersey & Community RTK:
Water CAS No. 7732-18-5
Sodium azide CAS. No 26628-22-8
Pennsylvania RTK:
Water CAS No. 7732-18-5
Sodium azide CAS No. 26628-22-8
Rhode Island RTK: No ingredient regulated by RI Right to Know Act present.

Section 16: Other Information
References: Not available. Other Special Considerations: Not available.
Last Updated: 07/06/2018 12:00 PM
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