

# PG-Seq™ Rapid Kit

## v2

## Safety Data Sheets

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Safety Data Sheet (SDS)

Cell Lysis Mix

**SECTION 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

**Product identifier:**

Product Name: Cell Lysis Mix  
 Additional information: Part of: PG-Seq™ Rapid Kit v2 Product Code 4340-0248.

**Relevant identification uses of the substance and uses advised against:**

Identified uses: Research Use Only.  
 Uses advised against: Not known.

**Details of the supplier of the Safety Data Sheet:**

Manufacturer: Revvity  
 2650 Crescent Drive, Suite 200  
 Lafayette, CO 80026  
 Emergency Telephone Number: ChemTrec +1 703-741-5970 (24/7)

**SECTION 2: HAZARDS IDENTIFICATION**



GHS Classification: GHS08 Health hazard

Resp. Sens. 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

**GHS label elements.** The product is classified and labeled according to the Globally Harmonized System (GHS).  
 Hazard pictograms



GHS08

Signal word: DANGER

Hazard-determining components of labeling: Proteinase, Tritirachium album serine

Hazard statements

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Precautionary statements

Avoid breathing dust/fume/gas/mist/vapors/spray

[In case of inadequate ventilation] wear respiratory protection.

If inhaled: If breathing is difficult, remove person to fresh air and keep comfortable for breathing.

If experiencing respiratory symptoms: Call a poison center/doctor.

Dispose of contents/container in accordance with local/regional/national/international regulations.

**SECTION 3: Composition/Information on Ingredients**

Chemical characterization: Mixtures

Description:

The product is made up of a mixture of non-hazardous components. The exact concentration percentages and components name may be withheld as a Revvity trade secret.

Identification	Name	Weight %
CAS Number: 56-81-5	Glycerol	1.25-5
CAS Number: 9450-01-6	Proteinase, Tritirachium album serine	<1

**Additional Information:**

The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of the OSHA Hazard Communication Standard (29 CFR §1910.1200).

**SECTION 4: First Aid Measures**
**Description of first aid measures**
**After inhalation:**

Supply fresh air and to be sure call for a doctor.

In case of unconsciousness place patient stably in side position for transportation.

**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 Allergic reactions

Indication of any immediate medical attention and special treatment needed

No further relevant information available.

**SECTION 5: Firefighting Measures**
**Extinguishing media**
**Suitable extinguishing agents:**

CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

**Special hazards arising from the substance or mixture**

None known

No further relevant information available.

Advice for firefighters No special advice

**SECTION 6: Accidental Release Measures**
**Personal precautions, protective equipment and emergency procedures**

Remove persons from danger area.

Wear protective clothing.

**Environmental precautions:**

Dilute with plenty of water.

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).

Dispose contaminated material as waste according to Section 13.

Ensure adequate ventilation.

**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

Keep receptacles tightly sealed.

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

Work only in fume cabinet.

Information about protection against explosions and fires: Keep respiratory protective device available.

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/Personal Protection

Control parameters

Components with limit values that require monitoring at the workplace:

The following constituent is the only constituent of the product which has a PEL, TLV or other recommended exposure limit.

At this time, the remaining constituent has no known exposure limits.

56-81-5 glycerol

PEL: Long term value: 15\*5\*\*mg/m<sup>3</sup>, mist; \*total dust \*\*respirable fraction

TLV: TLV withdrawn, insufficient data human occup. exp.

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

Exposure controls

Personal protective equipment:

General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Do not eat or drink while working.

Breathing equipment:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

Protection of hands:

Protective gloves

Select the glove material considering penetration time, rate of diffusion and degradation time.

It is recommended that the selected protective gloves be tested and approved under NIOSH or EU Directive 89/686/EEC and the standard EN 374 derived from it.

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:

Safety glasses

Use equipment for eye protection tested and approved under government NIOSH standards.

#### SECTION 9: Physical and Chemical Properties

Information on basic physical and chemical properties

General Information

Appearance:

Form: Fluid

**Color:** Colorless

**Odor:** Not determined

Odor threshold: Not determined.

pH-value at 20 °C (68 °F): 7.2

<p>Change in condition          Melting point/Melting range: Undetermined.          Boiling point/Boiling range: Undetermined.  <b>Flash point:</b> &gt; 100 °C (&gt; 212 °F)</p>
<p>Flammability (solid, gaseous): Not applicable.</p>
<p>Ignition temperature: 400 °C (752 °F)          Decomposition temperature: Not determined.</p>
<p><b>Auto igniting:</b> Product is not selfigniting</p>
<p><b>Danger of explosion:</b> Product does not present an explosion hazard.          Explosion limits:  <b>Lower:</b> 0.9 Vol %  <b>Upper:</b> 0.0 Vol %          Vapor pressure at 20 °C (68 °F): 0.1 hPa</p>
<p><b>Density at 20 °C (68 °F):</b> 1.119 g/cm<sup>3</sup> (9.33806 lbs/gal)          Relative density Not determined.  <b>Vapor density</b> Not determined.          Evaporation rate Not determined.          Solubility in / Miscibility with  <b>Water:</b> Fully miscible.          Partition coefficient (n-octanol/water): Not determined.          Viscosity:  <b>Dynamic:</b> Not determined.  <b>Kinematic:</b> Not determined.</p>
<p>Organic solvents: 50.0 %          Water: 47.8 %          VOC content: 0.00 %  <b>Other information</b> No further relevant information available.</p>

## SECTION 10: Stability and Reactivity

**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.

**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

Information on toxicological effects

Acute toxicity:

LD/LC50 values that are relevant for classification: No data available

Primary irritant effect:

**on the skin:** No data available.

**on the eye:** No data available.

**Sensitization:** Sensitization possible through inhalation.

Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations:

Harmful

Carcinogenic categories

IARC (International Agency for Research on Cancer): None of the ingredients are listed.

**NTP (National Toxicology Program):** None of the ingredients are listed.

OSHA-Ca (Occupational Safety & Health Administration): None of the ingredients are listed.

**SECTION 12: Ecological Information**

Aquatic toxicity:

Not available

No further relevant information available.

Persistence and degradability

Not available

No further relevant information available.

Bioaccumulative potential

Not known

No further relevant information available.

**Mobility in soil** No further relevant information available.

Ecotoxicological effects:

**Remark:** Not available

Additional ecological information:

**General notes:** No data available.

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**

**UN-Number** Not hazardous for transportation

DOT, ADR, ADN, IMDG, IATA Not applicable

UN proper shipping name None

DOT, ADR, ADN, IMDG, IATA Not applicable

Transport hazard class(es) None

DOT, ADR, ADN, IMDG, IATA

**Class** Not applicable

Packing group None

DOT, ADR, IMDG, IATA Not applicable

Environmental hazards:

Marine pollutant: No

Special precautions for user Not applicable

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable.

UN "Model Regulation": Not applicable

**SECTION 15: Regulatory Information**

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

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) Inventory: 56-81-5 glycerol

**Hazardous Air Pollutants** None of the 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.

Carcinogenicity 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** The product is classified and labeled according to the Globally Harmonized System (GHS).

Signal word Danger

Hazard-determining components of labeling

Proteinase, Tritirachium album serine

Hazard statements

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Precautionary statements

Avoid breathing dust/fume/gas/mist/vapors/spray

[In case of inadequate ventilation] wear respiratory protection.

If inhaled: If breathing is difficult, remove person to fresh air and keep comfortable for breathing.

If experiencing respiratory symptoms: Call a poison center/doctor.

Dispose of contents/container in accordance with local/regional/national/international 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

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Prepared by: Revvity Issuing

Date: 06-June-2022

PCR 1 Ready-mix

**SECTION 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

**Product identifier:**

Product Name: PCR 1 Ready-mix

Additional information: Part of: PG-Seq™ Rapid Kit v2 Product Code 4340-0248.

**Relevant identification uses of the substance and uses advised against:**

Identified uses: Research Use Only.

Uses advised against: Not known.

**Details of the supplier of the Safety Data Sheet:**

Manufacturer: Revvity

2650 Crescent Drive, Suite 200

Lafayette, CO 80026

Emergency Telephone Number: ChemTrec +1 703-741-5970 (24/7)

**SECTION 2: HAZARDS IDENTIFICATION**

GHS Classification:

The mixture is classified according to: SANS 10234:2008, Regulation EC 1272/2008 [EU-GHS/CLP]

**Hazard classes/Hazard categories: Hazard statement:**

Acute Toxicity, oral (Category 3) H301

STOT SE (Category 1) H370

**GHS label elements.** The product is classified and labeled according to the Globally Harmonized System (GHS).



Signal word: DANGER

**Hazard-determining components of labeling:** Tetramethylammonium chloride

Hazard statements

H301 Toxic if swallowed.

H370 Causes damage to organs.

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P270 Do not eat, drink or smoke when using this product.

P264 Wash hands thoroughly after handling.

P273 Avoid release to the environment.

P301+P312 IF SWALLOWED: Call a POISON CENTRE/doctor if you feel unwell.

P330 Rinse mouth.

**SECTION 3: Composition/Information on Ingredients**

Chemical characterization: Mixtures

Description:

The product is made up of a mixture of non-hazardous components. The exact concentration percentages and components name may be withheld as a Revvity trade secret.

Identification	Name	Weight %
CAS Number: 56-81-5	Glycerol	1.25-5



CAS Number: 75-57-0	Tetramethylammonium chloride	1-10%
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There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

#### SECTION 4: First Aid Measures

Description of first aid measures

**Description of first aid measures:**

**Inhalation:** If breathed in, move person into fresh air. If not breathing, give artificial respiration. In case of discomfort seek medical attention.

**Ingestion:** Toxic if swallowed.

**Skin Contact:** May be harmful in contact with skin.

Eye Contact: Not known.

**Most important symptoms and effects, both acute and delayed:**

**In case of inhalation:** If breathed in, move person into fresh air. If not breathing, give artificial respiration. In case of discomfort seek medical attention.

**In case of skin contact:** Wash off with soap and plenty of water for at least 15 minutes. In case of discomfort seek medical attention.

**In case of eye contact:** Flush eyes thoroughly with water for 15 minutes. Remove contact lenses after the initial 1-2 minutes and continue flushing. In case of discomfort seek medical attention.

**In case of ingestion:** Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. In case of discomfort seek medical attention.

Indication of any immediate medical attention and special treatment needed: None known

#### SECTION 5: Firefighting Measures

**Extinguisher media:**

**Suitable extinguisher media:** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Prevent contamination of drains or waterways.

**Unsuitable extinguishing media:** None known.

**Special hazards arising from the mixture:** Sealed containers may rupture when heated.

**Advice for fire-fighters:** Evacuate area and contact emergency services. Wear full protective equipment including Self Contained Breathing Apparatus (SCBA) when combating fire.

#### SECTION 6: Accidental Release Measures

**Personal precautions, protective equipment and emergency procedures:**

**For non-emergency personnel:** Isolate area. Keep unnecessary and unprotected personnel from entering the area. Refer to Section 7, Handling, for additional precautionary measures. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.

**For emergency responders:** Isolate area. Keep unnecessary and unprotected personnel from entering the area. Refer to Section 7, Handling, for additional precautionary measures. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.

**Environmental precautions:** Prevent from entering into soil, ditches, sewers, waterways and/or groundwater.

**Methods for containment and cleaning up:**

**For small spills:** Contain spilled material if possible. Clay, soil or commercially available absorbents may be used, collect in suitable and properly labelled containers.

**For large spills:** Contain area to prevent spill from spreading. Minimize adverse effects on the environment. Clay, soil or commercially available absorbents.

Additional information: None known.

#### SECTION 7: Handling and Storage

**Precautions for safe handling:**

**Protective measures:** Observe directions on label and instructions for use. Avoid contact with skin and eyes.

**Advice on general occupational hygiene:** Do not smoke. Do not eat drink or smoke when handling this product.

**Conditions for safe storage, including incompatibilities:** Store in a cool place. Keep container tightly closed in a dry and well ventilated place.

**Specific end uses:** Analytical reagent use only as directed.

#### SECTION 8: Exposure Controls/Personal Protection

**Occupational exposure limits:** No data available.

**Biological exposure indices (BEI):** No data available.

**Additional exposure limits under the conditions of use:** No data available.

**Exposure control:**

**Appropriate engineering controls:** Avoid inhalation. Use in well ventilated areas. Where an inhalation risk exists, mechanical extraction ventilation is recommended.

**Individual protection measures, such as personal protective equipment:**

**Eye/face protection:** Use safety glasses. If there is a potential for exposure to particles which could cause eye discomfort, wear chemical goggles.

**Hand protection:** Use chemical resistant gloves. Examples of preferred glove barrier materials include: Butyl rubber, Neoprene, Nitrile/butadiene rubber, Polyethylene, Ethyl vinyl alcohol laminate, polyvinyl alcohol, Polyvinyl chloride.

**Body protection:** Not necessary under normal use.

**Respiratory protection:** If discomfort is experienced, use an approved air-purifying respirator. Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines.

**Environmental exposure controls:** None required.

#### SECTION 9: Physical and Chemical Properties

Information on basic physical and chemical properties

General Information

**Appearance (form):** Liquid.

**Colour:** Colourless.

**Odour:** Not known.

**Odour threshold:** Not known

**pH (concentration):** Not known.

**Melting point/range (° C):** Not known.

**Boiling point/range (° C):** Not known.

**Flash point (° C):** Not known.

**Evaporation rate:** Not known.

**Flammability (solid, gas):** Not known.

**Ignition temperature (° C):** Not known.

**Decomposition temperature:** Not known..

**Upper/lower flammability/explosive limits:** Not known.

**Vapour pressure (20 °C):** Not known.

**Vapour density:** Not known.

**Relative density (25 °C):** Not known.

**Water solubility (g/l) at 20 °C:** Not known.

**n-Octanol/ Water partition coefficient:** Not known.

**Auto-ignition temperature:** Not known.

**Physical hazards:**

None.

**Other information:**

**Fat solubility (solvent-oil to be specified):** Not known.  
**Bulk density:** Not known.  
**Dissociation constant in water (p Ka):** Not known.  
**Oxidation-reduction potential:** Not known.

#### SECTION 10: Stability and Reactivity

**Reactivity:** No specific test data related to reactivity available for this product or its ingredients.  
**Chemical stability:** Stable under recommended conditions of storage. Product will not undergo hazardous polymerization.  
**Possibility of hazardous reactions:** Hazardous polymerization is not expected to occur.  
**Conditions to avoid:** Do not store next to heat source, in direct sunlight, or elevated storage temperature.  
**Incompatible materials:** Not known.  
**Hazardous decomposition products:** Under normal conditions of storage and use, hazardous decomposition products should not be produced.

#### SECTION 11: Toxicological Information

**Toxicity:** No data available.  
**Persistence and degradability:** No data available.  
**Bioaccumulative potential:** No data available.  
**Mobility in soil:** No data available.  
**Results of PBT& vPvB assessment:** No data available.  
Other adverse effects: No data available.

#### SECTION 12: Ecological Information

Aquatic toxicity:  
Not available  
No further relevant information available.  
Persistence and degradability  
Not available  
No further relevant information available.  
Bioaccumulative potential  
Not known  
No further relevant information available.  
**Mobility in soil** No further relevant information available.  
Ecotoxicological effects:  
**Remark:** Not available  
Additional ecological information:  
**General notes:** No data available.  
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:** Dispose of in accordance with municipal, provincial and national regulations.  
Product/ packaging disposal: Recycle where possible.

#### SECTION 14: Transport Information

**UN-Number** Not hazardous for transportation  
DOT, ADR, ADN, IMDG, IATA Not applicable

UN proper shipping name None DOT, ADR, ADN, IMDG, IATA Not applicable
Transport hazard class(es) None DOT, ADR, ADN, IMDG, IATA <b>Class</b> Not applicable
Packing group None DOT, ADR, IMDG, IATA Not applicable
Environmental hazards: Marine pollutant: Not applicable
Special precautions for user Not applicable
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable.
UN "Model Regulation": Not applicable

#### SECTION 15: Regulatory Information

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

**Relevant information regarding authorization:** Occupational Health and Safety Act 1993 Regulation for Hazardous Chemical Substances.

**Relevant information regarding restrictions:** None known.

**EU regulations:** Regulation EC 1272/2008 [EU-GHS/CLP]

**Other National regulations:** None.

Chemical Safety Assessment carried out? No.

#### SECTION 16: Other Information

**Indication of changes:** GHS aligned.

**Relevant classification and H statements (number and full text):**

STOT SE 1 - Specific Target Organ Toxicity Single Exposure (Category 1).

Aquatic Chronic 2 – Hazardous to the aquatic environment (Chronic Category 2).

Aquatic Chronic 3 – Hazardous to the aquatic environment (Chronic Category 3).

H300 Fatal if swallowed. H301 Toxic if swallowed. H311 Toxic in contact with skin. H315 Causes skin irritation.

H370 Causes damage to organs. H411 Toxic to aquatic life with long lasting effects. H412 Harmful to aquatic life with long lasting effects.

**Training instructions:** Use as instructed.

**Further information:** This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.

**Notice to readers:** Employers should use this information only as a supplement to other information gathered by them, and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees.

This information is furnished without warranty, and any use of the product not in conformance with this Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

PCR 1 Primer

SECTION 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**Product identifier:**

Product Name: PCR 1 Primer

**Additional information:** Part of: PG-Seq™ Rapid Kit v2 Product Code 4340-0248.

**Relevant identification uses of the substance and uses advised against:**

Identified uses: Research Use Only.

Uses advised against: Not known.

**Details of the supplier of the Safety Data Sheet:**

Manufacturer: Revvity

2650 Crescent Drive, Suite 200

Lafayette, CO 80026

Emergency Telephone Number: ChemTrec +1 703-741-5970 (24/7)

SECTION 2: HAZARDS IDENTIFICATION

Classification of the substances or mixture:

**The mixture is classified according to:** SANS 10234:2008, Regulation EC 1272/2008 [EU-GHS/CLP]

Hazard classes/Hazard categories: Not classified

Hazard statement: Not required

The most important adverse effects:

The most important adverse physiochemical effects: None

The most important adverse human health effects: None

Label elements:

Hazard pictograms: Not required

Signal Words: Not required

Hazard Statements: Not required

**Precautionary Statements:** P264 Wash thoroughly after handling. P270 Do not eat, drink or smoke when using this product.

Special labelling of certain mixtures: None known

Other hazards: None known

SECTION 3: Composition/Information on Ingredients

Substance/Mixture: Mixture

**Ingredients:** Not hazardous.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available listed in Section 8.

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: First Aid Measures

Description of first aid measures:

**Inhalation:** If breathed in, move person into fresh air. If not breathing, give artificial respiration. In case of discomfort seek medical attention.

**Ingestion:** Not known.

Skin Contact: Not known.

Eye Contact: Not known.

Most important symptoms and effects, both acute and delayed:

**In case of inhalation:** If breathed in, move person into fresh air. If not breathing, give artificial respiration. In case of discomfort seek medical attention.

**In case of skin contact:** Wash off with soap and plenty of water for at least 15 minutes. In case of discomfort seek medical attention.

**In case of eye contact:** Flush eyes thoroughly with water for 15 minutes. Remove contact lenses after the initial 1-2 minutes and continue flushing. In case of discomfort seek medical attention.

**In case of ingestion:** Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. In case of discomfort seek medical attention.

Indication of any immediate medical attention and special treatment needed: None known.

#### SECTION 5: Firefighting Measures

Extinguisher media:

**Suitable extinguisher media:** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Prevent contamination of drains or waterways.

Unsuitable extinguishing media: None known.

**Special hazards arising from the mixture:** Sealed containers may rupture when heated.

**Advice for fire-fighters:** Evacuate area and contact emergency services. Wear full protective equipment including Self Contained Breathing Apparatus (SCBA) when combating fire.

#### SECTION 6: Accidental Release Measures

Personal precautions, protective equipment and emergency procedures:

**For non-emergency personnel:** Isolate area. Keep unnecessary and unprotected personnel from entering the area. Refer to Section 7, Handling, for additional precautionary measures. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.

**For emergency responders:** Isolate area. Keep unnecessary and unprotected personnel from entering the area. Refer to Section 7, Handling, for additional precautionary measures. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.

**Environmental precautions:** Prevent from entering into soil, ditches, sewers, waterways and/or groundwater.

Methods for containment and cleaning up:

**For small spills:** Contain spilled material if possible. Clay, soil or commercially available absorbents may be used, collect in suitable and properly labelled containers.

**For large spills:** Contain area to prevent spill from spreading. Minimize adverse effects on the environment. Clay, soil or commercially available absorbents.

Additional information: None known.

#### SECTION 7: Handling and Storage

**Protective measures:** Observe directions on label and instructions for use. Avoid contact with skin and eyes.

Advice on general occupational hygiene: Do not smoke. Do not eat drink or smoke when handling this product.

**Conditions for safe storage, including incompatibilities:** Store in a cool place. Keep container tightly closed in a dry and well ventilated place.

**Specific end uses:** Analytical reagent use only as directed.

#### SECTION 8: Exposure Controls/Personal Protection

Control parameters:

Occupational exposure limits: No data available.

Biological exposure indices (BEI): No data available.

Additional exposure limits under the conditions of use: No data available.

Exposure control:

**Appropriate engineering controls:** Avoid inhalation. Use in well ventilated areas. Where an inhalation risk exists, mechanical extraction ventilation is recommended.

Individual protection measures, such as personal protective equipment:

**Eye/face protection:** Use safety glasses. If there is a potential for exposure to particles which could cause eye discomfort, wear chemical goggles.

**Hand protection:** Use chemical resistant gloves. Examples of preferred glove barrier materials include: Butyl rubber, Neoprene, Nitrile/butadiene rubber, Polyethylene, Ethyl vinyl alcohol laminate, polyvinyl alcohol, Polyvinyl chloride.

**Body protection:** Not necessary under normal use.

**Respiratory protection:** If discomfort is experienced, use an approved air-purifying respirator. Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines.

Environmental exposure controls: None required.

#### SECTION 9: Physical and Chemical Properties

Information on basic physical and chemical properties

Appearance (form): Liquid.

**Colour:** Colourless.

**Odour:** Not known.

Odour threshold: Not known.

pH (concentration): Not known.

Melting point/range (°C): Not known.

Boiling point/range (°C): Not known.

Flash point (°C): Not known.

Evaporation rate: Not known.

Flammability (solid, gas): Not known.

Ignition temperature (°C): Not known.

Upper/lower flammability/explosive limits: Not known.

Vapour pressure (20 °C): Not known.

Vapour density: Not known.

Relative density (25 °C): Not known.

Water solubility (g/L) at 20 °C: Not known.

n-Octanol/Water partition coefficient: Not known.

Auto-ignition temperature: Not known.

Decomposition temperature: Not known.

Viscosity, dynamic (mPa s): Not known.

Physical hazards:

None.

Other information:

Fat solubility (solvent-oil to be specified): Not known.

Bulk density: Not known.

Dissociation constant in water (pKa): Not known.

Oxidation-reduction potential: Not known.

#### SECTION 10: Stability and Reactivity

**Reactivity:** No specific test data related to reactivity available for this product or its ingredients.

**Chemical stability:** Stable under recommended conditions of storage. Product will not undergo hazardous polymerization.

**Possibility of hazardous reactions:** Hazardous polymerization is not expected to occur.

**Conditions to avoid:** Do not store next to heat source, in direct sunlight, or elevated storage temperature.

Incompatible materials: Not known.

**Hazardous decomposition products:** Under normal conditions of storage and use, hazardous decomposition products should not be produced.

**SECTION 11: Toxicological Information**

Toxicokinetics, metabolism and distribution:  
 Non-human toxicological data: No data available.  
**Method:** No data available.  
**Dosage:** No data available.  
 Routes of administration: No data available.  
**Results:** No data available.  
**Absorption:** No data available.  
**Distribution:** No data available.  
**Metabolism:** No data available.  
**Excretion:** No data available.

Information on toxicological effects:  
**Acute toxicity:** 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:** Not data available.  
 Reproductive toxicity: No data available.  
 STOT-single exposure: No data available.  
 STOT-repeated exposure: No data available.  
 Aspiration hazard: No data available.

**SECTION 12: Ecological Information**

**Toxicity:** No data available.  
 Persistence and degradability: No data available.  
 Bioaccumulative potential: No data available.  
**Mobility in soil:** No data available.  
 Results of PBT& vPvB assessment: No data available.  
 Other adverse effects: No data available.

**SECTION 13: Disposal Considerations**

**Waste treatment methods:** Dispose of in accordance with municipal, provincial and national regulations.  
 Product/packaging disposal: Recycle where possible.

**SECTION 14: Transport Information**

<b>UN-Number</b> Not hazardous for transportation DOT, ADR, ADN, IMDG, IATA Not applicable
UN proper shipping name None DOT, ADR, ADN, IMDG, IATA Not applicable
Transport hazard class(es) None DOT, ADR, ADN, IMDG, IATA <b>Class</b> Not applicable
Packing group None DOT, ADR, IMDG, IATA Not applicable
Environmental hazards:



Marine pollutant: No
Special precautions for user Not applicable
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable.
UN "Model Regulation": Not applicable

**SECTION 15: Regulatory Information**

Safety, health and environmental regulations/legislation for the mixture:

**Relevant information regarding authorization:** Occupational Health and Safety Act 1993 Regulation for Hazardous Chemical Substances.

Relevant information regarding restrictions: None known.

**EU regulations:** Regulation EC 1272/2008 [EU-GHS/CLP]

Other National regulations: None.

Chemical Safety Assessment carried out? No.

**SECTION 16: Other Information**

Indication of changes: GHS aligned.

Relevant classification and H statements (number and full text): None.

Training instructions: Use as instructed.

**Further information:** This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.

**Notice to readers:** Employers should use this information only as a supplement to other information gathered by them, and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees.

This information is furnished without warranty, and any use of the product not in conformance with this Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

PCR 2 Ready-mix

SECTION 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**Product identifier:**

Product Name: PCR 2 Ready-mix

**Additional information:** Part of: PG-Seq™ Rapid Kit v2 Product Code 4340-0248.

**Relevant identification uses of the substance and uses advised against:**

Identified uses: Research Use Only.

Uses advised against: Not known.

**Details of the supplier of the Safety Data Sheet:**

Manufacturer: Revvity

2650 Crescent Drive, Suite 200

Lafayette, CO 80026

Emergency Telephone Number: ChemTrec +1 703-741-5970 (24/7)

SECTION 2: HAZARDS IDENTIFICATION

**OSHA/HCS status:** While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.

Classification of the substances or mixture: not classified

Hazard classes/Hazard categories: Not classified

Hazard statement: Not required

The most important adverse effects:

The most important adverse physiochemical effects: None

The most important adverse human health effects: None

Label elements:

Hazard pictograms: Not required

Signal Words: Not required

Hazard Statements: Not required

Precautionary Statements: Not applicable

Special labelling of certain mixtures: None known

Other hazards: None known

SECTION 3: Composition/Information on Ingredients

Substance/Mixture: Mixture

**Ingredients:** Not hazardous.

Identification	Name	Weight %
CAS Number: 56-81-5	Glycerol	>10 - <25

Any concentration shown as a range is to protect confidentiality or is due to batch variation. If a generic chemical name is shown and/or the CAS number is not disclosed, the specific chemical identity has been withheld as a trade secret.

Occupational exposure limits, if available listed in Section 8.

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: First Aid Measures

Description of first aid measures:

**In case of eye contact:** Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.

**Inhalation:** Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours

**Skin contact:** Flush contaminated skin with plenty of water. Get medical attention if symptoms occur

**Ingestion:** Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

Most important symptoms and effects, both acute and delayed:

Potential acute health effects

**Eye contact:** No known significant effects or critical hazards.

**Inhalation:** No known significant effects or critical hazards.

**Skin contact:** No known significant effects or critical hazards.

**Ingestion:** No known significant effects or critical hazards.

Over exposure signs/symptoms:

**Eye contact:** No known significant effects or critical hazards.

**Inhalation:** No known significant effects or critical hazards.

**Skin contact:** No known significant effects or critical hazards.

**Ingestion:** No known significant effects or critical hazards.

Indication of immediate medical attention and special treatment needed, if necessary

**Notes to physician :** In case of inhalation of decomposition products in a fire, symptoms may be delayed.

The exposed person may need to be kept under medical surveillance for 48 hours

Specific treatments : No specific treatment.

**Protection of first-aiders :** No action shall be taken involving any personal risk or without suitable training.

#### SECTION 5: Firefighting Measures

Extinguisher media:

**Suitable extinguisher media:** Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media: None known.

**Special hazards arising from the mixture:** In a fire or if heated, a pressure increase will occur and the container may burst.

Hazardous thermal decomposition products:

Decomposition products may include the following materials:

carbon dioxide

carbon monoxide

nitrogen oxides

**Special protective actions for fire-fighters:** Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

**Special protective equipment for fire-fighters:** Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

#### SECTION 6: Accidental Release Measures

Personal precautions, protective equipment and emergency procedures:

**For non-emergency personnel:** No action shall be taken involving any personal risk or without suitable training.

Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment..

**For emergency responders:** If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For nonemergency personnel".

**Environmental precautions:** Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods for containment and cleaning up:

**For small spills:** Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

**For large spills:** Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal. Additional information: None known.

#### SECTION 7: Handling and Storage

**Protective measures:** Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. See also Section 8 for additional information on hygiene measures.

**Conditions for safe storage, including incompatibilities:** Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

#### SECTION 8: Exposure Controls/Personal Protection

Control parameters:

Occupational exposure limits:

Ingredient name	Exposure limits
Glycerol	OSHA PEL (United States, 5/2018). TWA: 5 mg/m <sup>3</sup> 8 hours. Form: Respirable fraction TWA: 15 mg/m <sup>3</sup> 8 hours. Form: Total dust

**Appropriate engineering controls:** Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

**Environmental exposure controls:** Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

#### Individual protection measures

##### Hygiene measures

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

##### Eye/face protection

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with sideshields.

**Skin protection**

**Hand protection**

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

**Body protection**

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Other skin protection**

Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Respiratory protection**

Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

**SECTION 9: Physical and Chemical Properties**

Information on basic physical and chemical properties

Appearance (form): Liquid.

**Colour:** Colourless.

**Odour:** Not known.

Odour threshold: Not known.

pH (concentration): 8.5

Melting point/range (°C): Not known.

Boiling point/range (°C): Not known.

Flash point (°C): Not known.

Evaporation rate: Not known.

Flammability (solid, gas): Not known.

Ignition temperature (°C): Not known.

Upper/lower flammability/explosive limits: Not known.

Vapour pressure (20 °C): Not known.

Vapour density: Not known.

Relative density (25 °C): Not known.

Water solubility (g/L) at 20 °C: Not known.

n-Octanol/Water partition coefficient: Not known.

Auto-ignition temperature: Not known.

Decomposition temperature: Not known.

Viscosity, dynamic (mPa s): Not known.

Physical hazards:

None.

Other information:

Fat solubility (solvent-oil to be specified): Not known.

Bulk density: Not known.

Dissociation constant in water (pKa): Not known.

Oxidation-reduction potential: Not known.

**SECTION 10: Stability and Reactivity**

**Reactivity:** No specific test data related to reactivity available for this product or its ingredients.

**Chemical stability:** This product is stable.

**Possibility of hazardous reactions:** Under normal conditions of storage and use, hazardous reactions will not occur

**Conditions to avoid:** No specific data.

**Incompatible materials:** Reactive or incompatible with the following materials: oxidizing materials

**Hazardous decomposition products:** Under normal conditions of storage and use, hazardous decomposition products should not be produced.

**SECTION 11: Toxicological Information**

Information on toxicological effects

**Acute toxicity**

Product/Ingredient name	Result	Species	Dose	Exposure
Glycerol	LD50 Oral	Rat	12600 mg/kg	-

**Irritation/Corrosion:** There is no data available.

**Sensitization:** There is no data available

**Mutagenicity:** There is no data available

**Carcinogenicity:** There is no data available

**Reproductive toxicity:** There is no data available

**Teratogenicity:** There is no data available.

**Specific target organ toxicity (single exposure):** There is no data available.

**Specific target organ toxicity (repeated exposure):** There is no data available.

**Aspiration hazard**

There is no data available

**Information on the likely routes of exposure:** Routes of entry anticipated: Oral, Dermal, Inhalation

**Potential acute health effects**

**Eye contact :** No known significant effects or critical hazards

**Inhalation :** No known significant effects or critical hazards.

**Skin contact :** No known significant effects or critical hazards

**Ingestion :** No known significant effects or critical hazards

**Symptoms related to the physical, chemical and toxicological characteristics**

**Eye contact :** No known significant effects or critical hazards.

**Inhalation :** No known significant effects or critical hazards.

**Skin contact :** No known significant effects or critical hazards

**Ingestion :** No known significant effects or critical hazards

**Delayed and immediate effects and also chronic effects from short and long term exposure**

**Short term exposure**

**Potential immediate effects:** No known significant effects or critical hazards

**Potential delayed effects :** No known significant effects or critical hazards

**Long term exposure**

**Potential immediate effects:** No known significant effects or critical hazards

**Potential delayed effects :** No known significant effects or critical hazards.

**Potential chronic health effects**

**General :** No known significant effects or critical hazards

**Carcinogenicity :** No known significant effects or critical hazards

**Mutagenicity :** No known significant effects or critical hazards

**Reproductive toxicity :** No known significant effects or critical hazards

**Numerical measures of toxicity**

**Acute toxicity estimates**

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases)	Inhalation (vapors)	Inhalation (dusts and mists) (mg/l)

			(ppm)	(mg/l)	
Glycerol	12600	n/a	n/a	n/a	n/a

#### SECTION 12: Ecological Information

**Toxicity:** No data available.

**Persistence and degradability:** No data available.

**Bioaccumulative potential:**

Product/Ingredient name	LogP <sub>ow</sub>	BCF	Potential
Glycerol	-1.76	-	low

**Mobility in soil:** No data available.

Results of PBT& vPvB assessment: No data available.

Other adverse effects: No data available.

#### SECTION 13: Disposal Considerations

**Waste treatment methods:** The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

#### SECTION 14: Transport Information

<b>UN-Number</b> Not hazardous for transportation DOT, ADR, ADN, IMDG, IATA Not applicable
UN proper shipping name None DOT, ADR, ADN, IMDG, IATA Not applicable
Transport hazard class(es) None DOT, ADR, ADN, IMDG, IATA <b>Class</b> Not applicable
Packing group None DOT, ADR, IMDG, IATA Not applicable
Environmental hazards: Marine pollutant: No
Special precautions for user Not applicable
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable.
UN "Model Regulation": Not applicable

**Special precautions for user:**

**Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

#### SECTION 15: Regulatory Information

Safety, health and environmental regulations/legislation for the mixture:

**Relevant information regarding authorization:** Occupational Health and Safety Act 1993 Regulation for Hazardous Chemical Substances.

Relevant information regarding restrictions: None known.

**EU regulations:** Regulation EC 1272/2008 [EU-GHS/CLP]

Other National regulations: None.

Chemical Safety Assessment carried out? No.

#### SECTION 16: Other Information

Indication of changes: GHS aligned.

Relevant classification and H statements (number and full text): None.

Training instructions: Use as instructed.

**Further information:** This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.

**Notice to readers:** Employers should use this information only as a supplement to other information gathered by them, and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees.

This information is furnished without warranty, and any use of the product not in conformance with this Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.



Clean-up Beads

SECTION 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**Product identifier:**

Product Name: Clean-up Beads

**Additional information:** Part of: PG-Seq™ Rapid Kit v2 Product Code 4340-0248.

**Relevant identification uses of the substance and uses advised against:**

Identified uses: Research Use Only.

Uses advised against: Not known.

**Details of the supplier of the Safety Data Sheet:**

Manufacturer: Revvity

2650 Crescent Drive, Suite 200

Lafayette, CO 80026

Emergency Telephone Number: ChemTrec +1 703-741-5970 (24/7)

SECTION 2: HAZARDS IDENTIFICATION

**Classification of the substances or mixture:**

The mixture is classified according to: SANS 10234:2008, Regulation EC 1272/2008 [EU-GHS/CLP]

**Hazard classes/Hazard categories:** Not classified

**Hazard statement:** Not required

**NFPA and HMIS rating Fire Hazard:** 1 (scale 0-4)

For full text of H-Statements see Section 16.

**The most important adverse effects:**

**The most important adverse physiochemical effects:** None

**The most important adverse human health effects:** None

**Label elements:**

**Hazard pictograms:** Not required

**Signal Words:** Not required

**Hazard Statements:** Not required

**Precautionary Statements:** P264 Wash thoroughly after handling. P270 Do not eat, drink or smoke when using this product.

**Special labelling of certain mixtures:** None known

**Other hazards:** None known

SECTION 3: Composition/Information on Ingredients

**Substance/Mixture:** Mixture

**Ingredients:** Not hazardous.

**Dangerous components:**

60-00-4	EDTA	1-2.5%
1185-53-1	2-amino-2-(hydroxymethyl)propane-1,3-diolhydrochloride	1-2.5%

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available listed in Section 8.

For the full text of the H-Statements mentioned in this Section, see Section 16.

#### SECTION 4: First Aid Measures

**Description of first aid measures:**

**Inhalation:** If breathed in, move person into fresh air. If not breathing, give artificial respiration. In case of discomfort seek medical attention.

**Ingestion:** Not known.

**Skin Contact:** Not known.

**Eye Contact:** Not known.

**Most important symptoms and effects, both acute and delayed:**

**In case of inhalation:** If breathed in, move person into fresh air. If not breathing, give artificial respiration. In case of discomfort seek medical attention.

**In case of skin contact:** Wash off with soap and plenty of water for at least 15 minutes. In case of discomfort seek medical attention.

**In case of eye contact:** Flush eyes thoroughly with water for 15 minutes. Remove contact lenses after the initial 1-2 minutes and continue flushing. In case of discomfort seek medical attention.

**In case of ingestion:** Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. In case of discomfort seek medical attention.

**Indication of any immediate medical attention and special treatment needed:** None known.

#### SECTION 5: Firefighting Measures

**Extinguisher media:**

**Suitable extinguisher media:** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Prevent contamination of drains or waterways.

**Unsuitable extinguishing media:** None known.

**Special hazards arising from the mixture:** Sealed containers may rupture when heated.

**Advice for fire-fighters:** Evacuate area and contact emergency services. Wear full protective equipment including Self Contained Breathing Apparatus (SCBA) when combating fire.

#### SECTION 6: Accidental Release Measures

**For non-emergency personnel:** Isolate area. Keep unnecessary and unprotected personnel from entering the area. Refer to Section 7, Handling, for additional precautionary measures. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.

**For emergency responders:** Isolate area. Keep unnecessary and unprotected personnel from entering the area. Refer to Section 7, Handling, for additional precautionary measures. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.

**Environmental precautions:** Prevent from entering into soil, ditches, sewers, waterways and/or groundwater.

**Methods for containment and cleaning up:**

**For small spills:** Contain spilled material if possible. Clay, soil or commercially available absorbents may be used, collect in suitable and properly labelled containers.

**For large spills:** Contain area to prevent spill from spreading. Minimize adverse effects on the environment. Clay, soil or commercially available absorbents.

**PAC-1:**

25322-68-3	Polyethylene glycol	30 mg/m <sup>3</sup>
60-00-4	EDTA	4.1 mg/m <sup>3</sup>
1185-53-1	2-amino-2-(hydroxymethyl)propane-1,3-diolhydrochloride	12 mg/m <sup>3</sup>
26628-22-8	sodium azide	0.026 mg/m <sup>3</sup>

· PAC-2:		
25322-68-3	Polyethylene glycol	1,300 mg/m <sup>3</sup>
60-00-4	EDTA	45 mg/m <sup>3</sup>
1185-53-1	2-amino-2-(hydroxymethyl)propane-1,3-diolhydrochloride	130 mg/m <sup>3</sup>
26628-22-8	sodium azide	0.29 mg/m <sup>3</sup>
· PAC-3:		
25322-68-3	Polyethylene glycol	7,700 mg/m <sup>3</sup>
60-00-4	EDTA	200 mg/m <sup>3</sup>
1185-53-1	2-amino-2-(hydroxymethyl)propane-1,3-diolhydrochloride	790 mg/m <sup>3</sup>
26628-22-8	sodium azide	5.3 mg/m <sup>3</sup>

#### SECTION 7: Handling and Storage

**Protective measures:** Observe directions on label and instructions for use. Avoid contact with skin and eyes.

Advice on general occupational hygiene: Do not smoke. Do not eat drink or smoke when handling this product.

**Conditions for safe storage, including incompatibilities:** Store in a cool place. Keep container tightly closed in a dry and well ventilated place.

**Specific end uses:** Analytical reagent use only as directed.

#### SECTION 8: Exposure Controls/Personal Protection

The following constituent is the only constituent of the product which has a PEL, TLV or other recommended exposure limit.

At this time, the other constituents have no known exposure limits.

25322-68-3 Polyethylene glycol (10-25%)	
WEEL	Long-term value: 10 mg/m <sup>3</sup> (H); MW>200

#### Control parameters:

**Occupational exposure limits:** No data available.

**Biological exposure indices (BEI):** No data available.

**Additional exposure limits under the conditions of use:** No data available.

#### Exposure control:

**Appropriate engineering controls:** Avoid inhalation. Use in well ventilated areas. Where an inhalation risk exists, mechanical extraction ventilation is recommended.

#### Individual protection measures, such as personal protective equipment:

**Eye/face protection:** Use safety glasses. If there is a potential for exposure to particles which could cause eye discomfort, wear chemical goggles.

**Hand protection:** Use chemical resistant gloves. Examples of preferred glove barrier materials include: Butyl rubber, Neoprene, Nitrile/butadiene rubber, Polyethylene, Ethyl vinyl alcohol laminate, polyvinyl alcohol, Polyvinyl chloride.

**Body protection:** Not necessary under normal use.

**Respiratory protection:** If discomfort is experienced, use an approved air-purifying respirator. Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines.

**Environmental exposure controls:** None required.

#### SECTION 9: Physical and Chemical Properties

##### Information on basic physical and chemical properties

**Appearance (form):** Liquid.  
**Colour:** Colourless.  
**Odour:** Not known.  
**Odour threshold:** Not known.  
**pH (concentration):** Not known.  
**Melting point/range (°C):** Not known.  
**Boiling point/range (°C):** Not known.  
**Flash point (°C):** Not known.  
**Evaporation rate:** Not known.  
**Flammability (solid, gas):** Not known.  
**Ignition temperature (°C):** Not known.  
**Upper/lower flammability/explosive limits:** Not known.  
**Vapour pressure (20 °C):** Not known.  
**Vapour density:** Not known.  
**Relative density (25 °C):** Not known.  
**Water solubility (g/L) at 20 °C:** Not known.  
**n-Octanol/Water partition coefficient:** Not known.  
**Auto-ignition temperature:** Not known.  
**Decomposition temperature:** Not known.  
**Viscosity, dynamic (mPa s):** Not known.  
**Physical hazards:**  
 None.  
**Other information:**  
**Fat solubility (solvent-oil to be specified):** Not known.  
**Bulk density:** Not known.  
**Dissociation constant in water (pKa):** Not known.  
**Oxidation-reduction potential:** Not known.

#### SECTION 10: Stability and Reactivity

**Reactivity:** No specific test data related to reactivity available for this product or its ingredients.  
**Chemical stability:** Stable under recommended conditions of storage. Product will not undergo hazardous polymerization.  
**Possibility of hazardous reactions:** Hazardous polymerization is not expected to occur.  
**Conditions to avoid:** Do not store next to heat source, in direct sunlight, or elevated storage temperature.  
**Incompatible materials:** Not known.  
**Hazardous decomposition products:** Under normal conditions of storage and use, hazardous decomposition products should not be produced.

#### SECTION 11: Toxicological Information

<b>LD/LC50 values that are relevant for classification: 26628-22-8 sodium azide</b>		
Oral	LD50	27 mg/kg (rat)
Dermal	LD50	20 mg/kg (rabbit)

**Toxicokinetics, metabolism and distribution:**  
**Non-human toxicological data:** No data available.  
**Method:** No data available.  
**Dosage:** No data available.

**Routes of administration:** No data available.

**Results:** No data available.

**Absorption:** No data available.

**Distribution:** No data available.

**Metabolism:** No data available.

**Excretion:** No data available.

**Information on toxicological effects:**

**Acute toxicity:** 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:** Not data available.

**Reproductive toxicity:** No data available.

**STOT-single exposure:** No data available.

**STOT-repeated exposure:** No data available.

**Aspiration hazard:** No data available.

SECTION 12: Ecological Information
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**Toxicity:** No data available.

**Persistence and degradability:** No data available.

**Bioaccumulative potential:** No data available.

**Mobility in soil:** No data available.

**Results of PBT& vPvB assessment:** No data available.

**Other adverse effects:** No data available.

SECTION 13: Disposal Considerations
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**Waste treatment methods:** Dispose of in accordance with municipal, provincial and national regulations.

**Product/packaging disposal:** Recycle where possible.

SECTION 14: Transport Information
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UN-Number Not hazardous for transportation DOT, ADR, ADN, IMDG, IATA Not applicable
UN proper shipping name None DOT, ADR, ADN, IMDG, IATA Not applicable
Transport hazard class(es) None DOT, ADR, ADN, IMDG, IATA Class Not applicable
Packing group None DOT, ADR, IMDG, IATA Not applicable
Environmental hazards: Marine pollutant: No
Special precautions for user Not applicable
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable.
UN "Model Regulation": Not applicable

**Special precautions for user:**

**Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

SECTION 15: Regulatory Information

**Section 355 (extremely hazardous substances):**

26628-22-8 sodium azide

**Section 313 (Specific toxic chemical listings):**

26628-22-8 sodium azide

**TSCA (Toxic Substances Control Act):**

All ingredients are listed.

**Safety, health and environmental regulations/legislation for the mixture:**

**Relevant information regarding authorization:** Occupational Health and Safety Act 1993 Regulation for Hazardous Chemical Substances.

**Relevant information regarding restrictions:** None known.

**EU regulations:** Regulation EC 1272/2008 [EU-GHS/CLP]

**Other National regulations:** None.

**Chemical Safety Assessment carried out?** No.

SECTION 16: Other Information

**Indication of changes:** GHS aligned.

**Relevant classification and H statements (number and full text):** None.

**Training instructions:** Use as instructed.

**Further information:** This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.

**Notice to readers:** Employers should use this information only as a supplement to other information gathered by them, and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees.

This information is furnished without warranty, and any use of the product not in conformance with this Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

Resuspension Buffer

SECTION 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**Product identifier:**

Product Name: Resuspension Buffer

**Additional information:** Part of: PG-Seq™ Rapid Kit v2 Product Code 4340-0248.

**Relevant identification uses of the substance and uses advised against:**

Identified uses: Research Use Only.

Uses advised against: Not known.

**Details of the supplier of the Safety Data Sheet:**

Manufacturer: Revvity

2650 Crescent Drive, Suite 200

Lafayette, CO 80026

Emergency Telephone Number: ChemTrec +1 703-741-5970 (24/7)

SECTION 2: HAZARDS IDENTIFICATION

**Classification of the substances or mixture:**

The mixture is classified according to: SANS 10234:2008, Regulation EC 1272/2008 [EU-GHS/CLP]

**Hazard classes/Hazard categories:** Not classified

**Hazard statement:** Not required

**NFPA and HMIS rating Fire Hazard:** 1 (scale 0-4)

For full text of H-Statements see Section 16.

**The most important adverse effects:**

**The most important adverse physiochemical effects:** None

**The most important adverse human health effects:** None

**Label elements:**

**Hazard pictograms:** Not required

**Signal Words:** Not required

**Hazard Statements:** Not required

**Precautionary Statements:** P264 Wash thoroughly after handling. P270 Do not eat, drink or smoke when using this product.

**Special labelling of certain mixtures:** None known

**Other hazards:** None known

SECTION 3: Composition/Information on Ingredients

**Substance/Mixture:** Mixture

**Ingredients:** Not hazardous.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available listed in Section 8.

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: First Aid Measures

**Description of first aid measures:**

**Inhalation:** If breathed in, move person into fresh air. If not breathing, give artificial respiration. In case of discomfort seek medical attention.

**Ingestion:** Not known.

**Skin Contact:** Not known.

**Eye Contact:** Not known.

**Most important symptoms and effects, both acute and delayed:**

**In case of inhalation:** If breathed in, move person into fresh air. If not breathing, give artificial respiration. In case of discomfort seek medical attention.

**In case of skin contact:** Wash off with soap and plenty of water for at least 15 minutes. In case of discomfort seek medical attention.

**In case of eye contact:** Flush eyes thoroughly with water for 15 minutes. Remove contact lenses after the initial 1-2 minutes and continue flushing. In case of discomfort seek medical attention.

**In case of ingestion:** Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. In case of discomfort seek medical attention.

**Indication of any immediate medical attention and special treatment needed:** None known.

SECTION 5: Firefighting Measures

**Extinguisher media:**

**Suitable extinguisher media:** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Prevent contamination of drains or waterways.

**Unsuitable extinguishing media:** None known.

**Special hazards arising from the mixture:** Sealed containers may rupture when heated.

**Advice for fire-fighters:** Evacuate area and contact emergency services. Wear full protective equipment including Self Contained Breathing Apparatus (SCBA) when combating fire.

SECTION 6: Accidental Release Measures

**Personal precautions, protective equipment and emergency procedures:**

**For non-emergency personnel:** Isolate area. Keep unnecessary and unprotected personnel from entering the area. Refer to Section 7, Handling, for additional precautionary measures. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.

**For emergency responders:** Isolate area. Keep unnecessary and unprotected personnel from entering the area. Refer to Section 7, Handling, for additional precautionary measures. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.

**Environmental precautions:** Prevent from entering into soil, ditches, sewers, waterways and/or groundwater.

**Methods for containment and cleaning up:**

**For small spills:** Contain spilled material if possible. Clay, soil or commercially available absorbents may be used, collect in suitable and properly labelled containers.

**For large spills:** Contain area to prevent spill from spreading. Minimize adverse effects on the environment. Clay, soil or commercially available absorbents.

**Protective Action Criteria for Chemicals**

**PAC-1: 77-86-1 Tris | 18 mg/m<sup>3</sup>**

**PAC-2: 77-86-1 Tris | 190 mg/m<sup>3</sup>**

**PAC-3: 77-86-1 Tris | 1,200 mg/m<sup>3</sup>**

SECTION 7: Handling and Storage

**Protective measures:** Observe directions on label and instructions for use. Avoid contact with skin and eyes.

**Advice on general occupational hygiene:** Do not smoke. Do not eat drink or smoke when handling this product.

**Conditions for safe storage, including incompatibilities:** Store in a cool place. Keep container tightly closed in a dry and well ventilated place.

**Specific end uses:** Analytical reagent use only as directed.



## SECTION 8: Exposure Controls/Personal Protection

### Control parameters:

**Occupational exposure limits:** No data available.

**Biological exposure indices (BEI):** No data available.

**Additional exposure limits under the conditions of use:** No data available.

### Exposure control:

**Appropriate engineering controls:** Avoid inhalation. Use in well ventilated areas. Where an inhalation risk exists, mechanical extraction ventilation is recommended.

### Individual protection measures, such as personal protective equipment:

**Eye/face protection:** Use safety glasses. If there is a potential for exposure to particles which could cause eye discomfort, wear chemical goggles.

**Hand protection:** Use chemical resistant gloves. Examples of preferred glove barrier materials include: Butyl rubber, Neoprene, Nitrile/butadiene rubber, Polyethylene, Ethyl vinyl alcohol laminate, polyvinyl alcohol, Polyvinyl chloride.

**Body protection:** Not necessary under normal use.

**Respiratory protection:** If discomfort is experienced, use an approved air-purifying respirator. Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines.

**Environmental exposure controls:** None required.

## SECTION 9: Physical and Chemical Properties

### Information on basic physical and chemical properties

**Appearance (form):** Liquid.

**Colour:** Colourless.

**Odour:** Not known.

**Odour threshold:** Not known.

**pH (concentration):** Not known.

**Melting point/range (°C):** Not known.

**Boiling point/range (°C):** Not known.

**Flash point (°C):** Not known.

**Evaporation rate:** Not known.

**Flammability (solid, gas):** Not known.

**Ignition temperature (°C):** Not known.

**Upper/lower flammability/explosive limits:** Not known.

**Vapour pressure (20 °C):** Not known.

**Vapour density:** Not known.

**Relative density (25 °C):** Not known.

**Water solubility (g/L) at 20 °C:** Not known.

**n-Octanol/Water partition coefficient:** Not known.

**Auto-ignition temperature:** Not known.

**Decomposition temperature:** Not known.

**Viscosity, dynamic (mPa s):** Not known.

**Physical hazards:** None.

### Other information:

**Fat solubility (solvent-oil to be specified):** Not known.

**Bulk density:** Not known.

**Dissociation constant in water (pKa):** Not known.

**Oxidation-reduction potential:** Not known.

SECTION 10: Stability and Reactivity

**Reactivity:** No specific test data related to reactivity available for this product or its ingredients.

**Chemical stability:** Stable under recommended conditions of storage. Product will not undergo hazardous polymerization.

**Possibility of hazardous reactions:** Hazardous polymerization is not expected to occur.

**Conditions to avoid:** Do not store next to heat source, in direct sunlight, or elevated storage temperature.

**Incompatible materials:** Not known.

**Hazardous decomposition products:** Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological Information

**Toxicokinetics, metabolism and distribution:**

**Non-human toxicological data:** No data available.

**Method:** No data available.

**Dosage:** No data available.

**Routes of administration:** No data available.

**Results:** No data available.

**Absorption:** No data available.

**Distribution:** No data available.

**Metabolism:** No data available.

**Excretion:** No data available.

**Information on toxicological effects:**

**Acute toxicity:** 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:** Not data available.

**Reproductive toxicity:** No data available.

**STOT-single exposure:** No data available.

**STOT-repeated exposure:** No data available.

**Aspiration hazard:** No data available.

SECTION 12: Ecological Information

**Toxicity:** No data available.

**Persistence and degradability:** No data available.

**Bioaccumulative potential:** No data available.

**Mobility in soil:** No data available.

**Results of PBT& vPvB assessment:** No data available.

**Other adverse effects:** No data available.

SECTION 13: Disposal Considerations

**Waste treatment methods:** Dispose of in accordance with municipal, provincial and national regulations.

**Product/packaging disposal:** Recycle where possible

SECTION 14: Transport Information

**UN-Number** Not hazardous for transportation

**DOT, ADR, ADN, IMDG, IATA** Not applicable

**UN proper shipping name** None

DOT, ADR, ADN, IMDG, IATA Not applicable
Transport hazard class(es) None DOT, ADR, ADN, IMDG, IATA <b>Class</b> Not applicable
Packing group None DOT, ADR, IMDG, IATA Not applicable
Environmental hazards: Marine pollutant: No
Special precautions for user Not applicable
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable.
UN "Model Regulation": Not applicable

**Special precautions for user:**

**Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

**SECTION 15: Regulatory Information**

**Safety, health and environmental regulations/legislation for the mixture:**

**Relevant information regarding authorization:** Occupational Health and Safety Act 1993 Regulation for Hazardous Chemical Substances.

**Relevant information regarding restrictions:** None known.

**EU regulations:** Regulation EC 1272/2008 [EU-GHS/CLP]

**Other National regulations:** None.

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**SECTION 16: Other Information**

**Indication of changes:** GHS aligned.

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**Training instructions:** Use as instructed.

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