1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

**Product identifier**

- **Product Name**: Propylphosphonic acid
- **Product Code**: SC-236493

**Recommended use of the chemical and restrictions on use**

For research use only. Not intended for diagnostic or therapeutic use.

**Details of the supplier of the safety data sheet**

Santa Cruz Biotechnology, Inc.
10410 Finnell Street
Dallas, TX 75220
831.457.3800
800.457.3801
scbt@scbt.com

**Emergency telephone number**

Chemtrec
1.800.424.9300 (Within USA)
+1.703.527.3887 (Outside USA)

2. HAZARDS IDENTIFICATION

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

**Classification**

- Skin corrosion/irritation: Category 1 Sub-category B
- Serious eye damage/eye irritation: Category 1

**Label elements**

- **Signal word**: Danger
- **Hazard statements**: Causes severe skin burns and eye damage

**Precautionary Statements - Prevention**

- Do not breathe dust/fume/gas/mist/vapors/spray
- Wash face, hands and any exposed skin thoroughly after handling
- Wear protective gloves/protective clothing/eye protection/face protection

**Precautionary Statements - Response**

- Immediately call a POISON CENTER or doctor/physician
  - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
  - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
  - Wash contaminated clothing before reuse
  - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
  - Immediately call a POISON CENTER or doctor/physician
  - IF SWALLOWED: Rinse mouth. DO NOT induce vomiting

**Precautionary Statements - Storage**

- Store locked up

**Precautionary Statements - Disposal**

- Dispose of contents/container to an approved waste disposal plant
Hazards not otherwise classified (HNOC)
Not applicable

Other Information
Unknown acute toxicity
100% of the mixture consists of ingredient(s) of unknown toxicity.

<table>
<thead>
<tr>
<th>NFPA</th>
<th>Health hazards</th>
<th>3</th>
<th>HMIS</th>
<th>Health hazards</th>
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<tr>
<td></td>
<td>Flammability</td>
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<tr>
<td></td>
<td>Stability</td>
<td>0</td>
<td></td>
<td>Physical hazards</td>
<td>0</td>
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<tr>
<td></td>
<td>Physical and chemical properties</td>
<td>-</td>
<td></td>
<td>Personal protection</td>
<td>-</td>
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</tbody>
</table>

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Molecular Weight</th>
<th>Formula</th>
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<tbody>
<tr>
<td>4672-38-2</td>
<td>124.08</td>
<td>C₃H₉O₃P</td>
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<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No</th>
<th>Weight %</th>
<th>Oral LD₅₀</th>
<th>Dermal LD₅₀</th>
<th>Inhalation LC₅₀</th>
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</thead>
<tbody>
<tr>
<td>Propylphosphonic acid</td>
<td>4672-38-2</td>
<td>&gt;98</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

First Aid Measures
General advice Consult a physician if necessary. Remove to fresh air.
Eye contact Wash with plenty of water.
Skin Contact Wash skin with soap and water.
Inhalation Remove to fresh air if breathing is difficult, give oxygen If not breathing, give artificial respiration
Ingestion Never give anything by mouth to an unconscious person. Clean mouth with water.

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

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

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media
None.

Specific hazards arising from the chemical
Specific hazards arising from the chemical No information available.
Hazardous combustion products Carbon oxides.

Explosion data
Sensitivity to Mechanical Impact No information available.
Sensitivity to Static Discharge 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.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions: Ensure adequate ventilation, especially in confined areas.

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: Use personal protective equipment as required. Cover powder spill with plastic sheet or tarp to minimize spreading and keep powder dry. Take up mechanically, placing in appropriate containers for disposal. Avoid creating dust. Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling: Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Storage Conditions: Protect from moisture. Store at 4 °C.

Incompatible materials: None known based on information supplied.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

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

Engineering Controls: Showers, Eyewash stations, Ventilation systems

Individual protection measures, such as personal protective equipment

Eye/face protection: Wear safety glasses with side shields (or goggles).

Skin and Body Protection: Wear protective gloves and protective clothing.

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.

9. PHYSICAL AND CHEMICAL PROPERTIES
Physical State: Solid
Appearance: No information available
Odor: No information available

**Property**
- pH: No information available
- Melting point/freezing point: No information available
- Boiling point: No information available
- Flash point: No information available
- Density: No information available
- Evaporation rate: No information available
- Upper flammability limits: No information available
- Lower flammability limit: No information available
- Vapor pressure: No information available
- Vapor density: No information available
- Specific gravity: No information available
- Water solubility: No information available
- Solubility in other solvents: No information available
- Partition coefficient: No information available
- Autoignition temperature: No information available
- Decomposition temperature: No information available
- Kinematic viscosity: No information available
- Explosive properties: No information available
- Oxidizing properties: No information available

**Values**
- pH: No information available
- Melting point/freezing point: 67 °C
- Boiling point: No information available
- Flash point: No information available
- Density: No information available
- Evaporation rate: No information available
- Upper flammability limits: No information available
- Lower flammability limit: No information available
- Vapor pressure: No information available
- Vapor density: No information available
- Specific gravity: No information available
- Water solubility: No information available
- Solubility in other solvents: No information available
- Partition coefficient: No information available
- Autoignition temperature: No information available
- Decomposition temperature: No information available
- Kinematic viscosity: No information available
- Explosive properties: No information available
- Oxidizing properties: No information available

**10. STABILITY AND REACTIVITY**

Reactivity: Not applicable
Chemical stability: Stable under recommended storage conditions.
Possibility of Hazardous Reactions: None under normal processing.
Hazardous polymerization: No information available.
Conditions to avoid: Exposure to air or moisture over prolonged periods.
Incompatible materials: Strong oxidizing agents.
Hazardous Decomposition Products: Carbon oxides.

**11. TOXICOLOGICAL INFORMATION**

Information on likely routes of exposure
- Inhalation: No data available.
- Eye contact: No data available.
- Skin Contact: No data available.
- Ingestion: No data available.

Information on toxicological effects
- Symptoms: No information available.
- Delayed and immediate effects as well as chronic effects from short and long-term exposure
  - Chronic Toxicity: No information available.

Numerical measures of toxicity - Product Information
- Unknown acute toxicity: 100% of the mixture consists of ingredient(s) of unknown toxicity

**12. ECOLOGICAL INFORMATION**
Ecotoxicity

May cause long lasting harmful effects to aquatic life

100% of the mixture consists of components(s) of unknown hazards to the aquatic environment.

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Mobility

No information available.

13. DISPOSAL CONSIDERATIONS

Disposal of wastes

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

Contaminated packaging

Do not reuse container.

US EPA Waste Number

D002

14. TRANSPORT INFORMATION

DOT

UN/ID no

UN3260

Hazard Class

8

Packing Group

III

Proper shipping name

Corrosive solid, acidic, inorganic, n.o.s.

Description

UN3260, Corrosive solid, acidic, inorganic, n.o.s., 8, III

Emergency Response Guide Number

154

IMDG

UN/ID no

UN3260

Hazard Class

8

Packing Group

III

Proper shipping name

Corrosive solid, acidic, inorganic, n.o.s.

Description

UN3260, Corrosive solid, acidic, inorganic, n.o.s., 8, III

Special Provisions

223, 274

EmS-No

F-A, S-B

IATA

UN/ID no

UN3260

Hazard Class

8

Packing Group

III

Proper shipping name

Corrosive solid, acidic, inorganic, n.o.s.

Description

UN3260, Corrosive solid, acidic, inorganic, n.o.s., 8, III

15. REGULATORY INFORMATION

International Inventories

All of the components in the product are on the following Inventory lists

Europe (EINECS/ELINCS/NLP) South Korea (KECL): China (IECSC) ENCS (Japan):

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>TSCA</th>
<th>DSL</th>
<th>NDSL</th>
<th>EINECS</th>
<th>ELINCS</th>
<th>ENCS</th>
<th>IECSC</th>
<th>KECL</th>
<th>PICCS</th>
<th>AICS</th>
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</thead>
<tbody>
<tr>
<td>Propylphosphonic acid</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

X - Listed

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

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances

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
Acute health hazard No
Chronic Health Hazard No
Fire hazard No
Sudden release of pressure hazard No
Reactive hazard No

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).

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

16. OTHER INFORMATION

Revision note No information available

Disclaimer
The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet