Urea Broth, Dehydrated

Section 1
Product Description

Product Name: Urea Broth, Dehydrated
Recommended Use: Science education applications
Synonyms: Urea Broth Base, Dehydrated
Distributor: Carolina Biological Supply Company
2700 York Road, Burlington, NC 27215
1-800-227-1150

Chemical Information:
800-227-1150 (8am-5pm (ET) M-F)
Chemtrec: 800-424-9300 (Transportation Spill Response 24 hours)

Section 2
Hazard Identification

Classification of the chemical in accordance with paragraph (d) of §1910.1200;

GHS Classification:

Other Safety Precautions: May cause eye irritation. May cause gastrointestinal discomfort. May cause irritation to respiratory tract. May cause irritation to skin.

Acute Toxicity Dermal Contains 52 % of the mixture consists of ingredient(s) of unknown toxicity
Acute Toxicity Inhalation Dust/Mist Contains 100 % of the mixture consists of ingredient(s) of unknown toxicity

Section 3
Composition / Information on Ingredients

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS #</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urea, Crystal</td>
<td>57-13-6</td>
<td>51.7</td>
</tr>
<tr>
<td>Potassium Phosphate, Dibasic</td>
<td>7758-11-4</td>
<td>24.5</td>
</tr>
<tr>
<td>Potassium Phosphate, Monobasic</td>
<td>7778-77-0</td>
<td>23.5</td>
</tr>
<tr>
<td>Yeast Extract</td>
<td>8013-01-2</td>
<td>0.3</td>
</tr>
<tr>
<td>Phenol Red, Sodium Salt</td>
<td>34487-61-1</td>
<td>0</td>
</tr>
</tbody>
</table>

Section 4
First Aid Measures

Emergency and First Aid Procedures

Inhalation: In case of accident by inhalation: remove casualty to fresh air and keep at rest.
Eyes: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
Skin Contact: After contact with skin, wash immediately with plenty of water.
Ingestion: If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

Section 5
Firefighting Procedures

Extinguishing Media: Use alcohol foam, carbon dioxide, or water spray when fighting fires involving this material.

Fire Fighting Methods and Protection: Firefighters should wear full protective equipment and NIOSH approved self-contained breathing apparatus.

Fire and/or Explosion Hazards: N/A
Hazardous Combustion Products: Carbon dioxide, Carbon monoxide, Nitrogen oxides

Section 6
Spill or Leak Procedures
Steps to Take in Case Material Is Released or Spilled:

Exposure to the spilled material may be irritating or harmful. Follow personal protective equipment recommendations found in Section 8 of this SDS. Additional precautions may be necessary based on special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred. Also consider the expertise of employees in the area responding to the spill. Ventilate the contaminated area. Avoid the generation of dusts during clean-up.

Prevent the spread of any spill to minimize harm to human health and the environment if safe to do so. Wear complete and proper personal protective equipment following the recommendation of Section 8 at a minimum. Dike with suitable absorbent material like granulated clay. Gather and store in a sealed container pending a waste disposal evaluation. Gather and store in a sealed container pending a waste disposal evaluation.

Section 7  Handling and Storage

Handling: Avoid creating and inhaling dust.
Storage: Keep container tightly closed in a cool, well-ventilated place.
Storage Code: Green - general chemical storage

Section 8  Protection Information

Control Parameters
Engineering Measures: No exposure limits exist for the constituents of this product. General room ventilation might be required to maintain operator comfort under normal conditions of use.

Personal Protective Equipment (PPE):
Respiratory Protection: No respiratory protection required under normal conditions of use.
Respirator Type(s): None required where adequate ventilation is provided. If airborne concentrations are above the applicable exposure limits, use NIOSH/MSHA approved respiratory protection.

Eye Protection: Wear chemical splash goggles when handling this product. Have an eye wash station available.

Skin Protection: Avoid skin contact by wearing chemically resistant gloves, an apron and other protective equipment depending upon conditions of use. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work.

Gloves: Natural rubber, Neoprene, PVC or equivalent., Nitrile, Butyl rubber, Neoprene, Polyvinyl chloride

Section 9  Physical Data

Formula: See Section 3
Molecular Weight: N/A
Appearance: Pale yellow Powder
Odor: None
Odor Threshold: No data available
pH: 6.8±0.2
Melting Point: 253 C
Boiling Point: No data available 132 - 135 C
Flash Point: No data available
Flammable Limits in Air: N/A

Vapor Pressure: N/A
Evaporation Rate (BuAc=1): N/A
Vapor Density (Air=1): N/A
Specific Gravity: N/A
Solubility in Water: Soluble
Log Pow (calculated): No data available
Autoignition Temperature: No data available
Decomposition Temperature: No data available
Viscosity: No data available
Percent Volatile by Volume: N/A

Section 10  Reactivity Data

Reactivity: No data available
Chemical Stability: Stable under normal conditions.
Conditions to Avoid: Exposure to moisture
Incompatible Materials: Strong oxidizing agents, Strong reducing agents
Hazardous Decomposition Products: Nitrogen oxides, Carbon dioxide, Carbon monoxide
Hazardous Polymerization: Will not occur
Section 11  Toxicity Data

Routes of Entry  Inhalation and ingestion.
Symptoms (Acute):  N/A
Delayed Effects:  No data available

Acute Toxicity:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS Number</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalation LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urea, Crystal</td>
<td>57-13-6</td>
<td>Oral LD50 Mouse 11000 mg/kg</td>
<td>Dermal LD50 Rabbit &gt; 4640 mg/kg</td>
<td></td>
</tr>
<tr>
<td>Potassium Phosphate, Monobasic</td>
<td>7778-77-0</td>
<td>Oral LD50 Rat 3200 mg/kg</td>
<td>Dermal LD50 Rabbit &gt; 4640 mg/kg</td>
<td></td>
</tr>
<tr>
<td>Phenol Red, Sodium Salt</td>
<td>34487-61-1</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Carcinogenicity:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS Number</th>
<th>IARC</th>
<th>NTP</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potassium Phosphate, Monobasic</td>
<td>7778-77-0</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Phenol Red, Sodium Salt</td>
<td>34487-61-1</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Chronic Effects:

- Mutagenicity:  No evidence of a mutagenic effect.
- Teratogenicity:  No evidence of a teratogenic effect (birth defect).
- Sensitization:  No evidence of a sensitization effect.
- Reproductive:  No evidence of negative reproductive effects.

Target Organ Effects:

- Acute:  See Section 2
- Chronic:  N/A

Section 12  Ecological Data

Overview:  This material is not expected to be harmful to the ecology.
Mobility:  No data
Persistence:  Dissolved into water, Biodegradation
Bioaccumulation:  No data
Degradability:  No data
Other Adverse Effects:  No data

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS Number</th>
<th>Eco Toxicity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urea, Crystal</td>
<td>57-13-6</td>
<td>96 HR LC50 POECILIA RETICULATA 16200 - 18300 MG/L</td>
</tr>
<tr>
<td></td>
<td></td>
<td>48 HR EC50 DAPHNIA MAGNA 3910 MG/L [STATIC]</td>
</tr>
<tr>
<td></td>
<td></td>
<td>24 HR EC50 DAPHNIA MAGNA STRAUS &gt; 10000 MG/L</td>
</tr>
<tr>
<td>Potassium Phosphate, Monobasic</td>
<td>7778-77-0</td>
<td></td>
</tr>
</tbody>
</table>

Section 13  Disposal Information

Disposal Methods:  Dispose in accordance with all applicable Federal, State and Local regulations. Always contact a permitted waste disposer (TSD) to assure compliance.
Waste Disposal Code(s):  Not Determined

Section 14  Transport Information

Ground - DOT Proper Shipping Name:  Not Regulated for Transport
Air - IATA Proper Shipping Name:  Not regulated for air transport by IATA.

Section 15  Regulatory Information

TSCA Status:  All components in this product are on the TSCA Inventory.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS Number</th>
<th>§ 313 Name</th>
<th>§ 304 RQ</th>
<th>CERCLA RQ</th>
<th>§ 302 TPQ</th>
<th>CAA 112(2) TQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potassium Phosphate, Monobasic</td>
<td>7778-77-0</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

Urea Broth, Dehydrated
Section 16 Additional Information


The information provided in this (Material) Safety Data Sheet represents a compilation of data drawn directly from various sources available to us. Carolina Biological Supply makes no representation or guarantee as to the suitability of this information to a particular application of the substance covered in the (Material) Safety Data Sheet.

<table>
<thead>
<tr>
<th>Glossary</th>
<th>Term</th>
<th>Abbreviation</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACGIH</td>
<td>American Conference of Governmental Industrial Hygienists</td>
<td>NTP</td>
<td>National Toxicology Program</td>
</tr>
<tr>
<td>CAS</td>
<td>Chemical Abstract Service Number</td>
<td>OSHA</td>
<td>Occupational Safety and Health Administration</td>
</tr>
<tr>
<td>CERCLA</td>
<td>Comprehensive Environmental Response, Compensation, and Liability Act</td>
<td>PEL</td>
<td>Permissible Exposure Limit</td>
</tr>
<tr>
<td>DOT</td>
<td>U.S. Department of Transportation</td>
<td>ppm</td>
<td>Parts per million</td>
</tr>
<tr>
<td>IARC</td>
<td>International Agency for Research on Cancer</td>
<td>RCRA</td>
<td>Resource Conservation and Recovery Act</td>
</tr>
<tr>
<td>N/A</td>
<td>Not Available</td>
<td>SARA</td>
<td>Superfund Amendments and Reauthorization Act</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TLV</td>
<td>Threshold Limit Value</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TSCA</td>
<td>Toxic Substances Control Act</td>
</tr>
<tr>
<td></td>
<td></td>
<td>IDLH</td>
<td>Immediately dangerous to life and health</td>
</tr>
</tbody>
</table>