Murexide, Monohydrate

1. Product Identification

Synonyms: Acid Ammonium Purpurate; C.I. 56085
CAS No.: 3051-09-0 (Anhydrous) 6032-80-0 (Monohydrate)
Molecular Weight: 302.22
Chemical Formula: C8H8N6O6 . H2O
Product Codes: R372

2. Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>CAS No</th>
<th>Percent</th>
<th>Hazardous</th>
</tr>
</thead>
<tbody>
<tr>
<td>Murexide</td>
<td>3051-09-0</td>
<td>90 - 100%</td>
<td>Yes</td>
</tr>
</tbody>
</table>

3. Hazards Identification

Emergency Overview

WARNING! TOXICOLOGICAL PROPERTIES UNKNOWN. MAY BE HARMFUL IF SWALLOWED, INHALED OR ABSORBED THROUGH SKIN. MAY CAUSE IRRITATION TO SKIN, EYES, AND RESPIRATORY TRACT.

SAF-T-DATA(tm) Ratings (Provided here for your convenience)

Health Rating: 1 - Slight
Flammability Rating: 0 - None
Reactivity Rating: 0 - None
Contact Rating: 2 - Moderate (Life)
Lab Protective Equip: GOGGLES; LAB COAT; PROPER GLOVES
Storage Color Code: Green (General Storage)

Potential Health Effects

All non-emergency questions should be directed to Customer Service (1-800-562-2537) for assistance.
Information on the human health effects from exposure to this substance is limited.

**Inhalation:**
No information found, but compound should be handled as a potential health hazard. May cause irritation to the respiratory tract. Symptoms may include coughing, sore throat, labored breathing, and chest pain.

**Ingestion:**
No information found, but compound should be handled as a potential health hazard. May cause irritation to the gastrointestinal tract. Symptoms may include nausea, vomiting and diarrhea.

**Skin Contact:**
No information found, but compound should be handled as a potential health hazard. May cause irritation with redness and pain. May be absorbed through the skin with possible systemic effects.

**Eye Contact:**
No information found, but compound should be handled as a potential health hazard. May cause irritation, redness and pain.

**Chronic Exposure:**
No information found.

**Aggravation of Pre-existing Conditions:**
No information found.

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### 4. First Aid Measures

**Inhalation:**
Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

**Ingestion:**
Give large amounts of water to drink. Never give anything by mouth to an unconscious person. Get medical attention.

**Skin Contact:**
Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention. Wash clothing before reuse. Thoroughly clean shoes before reuse.

**Eye Contact:**
Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

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### 5. Fire Fighting Measures

**Fire:**
Not considered to be a fire hazard.

**Explosion:**
Not considered to be an explosion hazard.

**Fire Extinguishing Media:**
Use any means suitable for extinguishing surrounding fire.

**Special Information:**
In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

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### 6. Accidental Release Measures

Ventilate area of leak or spill. Keep unnecessary and unprotected people away from area of spill. Wear appropriate personal protective equipment as specified in Section 8. Spills: Pick up and place in a suitable container for reclamation or disposal, using a method that does not generate dust.
7. Handling and Storage

Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage. Containers of this material may be hazardous when empty since they retain product residues (dust, solids); observe all warnings and precautions listed for the product.

8. Exposure Controls/Personal Protection

Airborne Exposure Limits:
None established.

Ventilation System:
A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, *Industrial Ventilation, A Manual of Recommended Practices*, most recent edition, for details.

Personal Respirators (NIOSH Approved):
For conditions of use where exposure to the dust or mist is apparent, a half-face dust/mist respirator may be worn. For emergencies or instances where the exposure levels are not known, use a full-face positive-pressure, air-supplied respirator. WARNING: Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.

Skin Protection:
Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

Eye Protection:
Use chemical safety goggles and/or full face shield where dusting or splashing of solutions is possible. Maintain eye wash fountain and quick-drench facilities in work area.

Other Control Measures:
There is insufficient data in the published literature to assign complete numerical SAF-T-DATA* ratings and laboratory protective equipment for this product. Special precautions must be used in storage, use and handling. Protective equipment for laboratory bench use should be chosen using professional judgment based on the size and type of reaction or test to be conducted and the available ventilation, with overriding consideration to minimize contact with the chemical.

9. Physical and Chemical Properties

Appearance:
Dark red Powder.

Odor:
Odorless.

Solubility:
Slight (0.1-1%)

Specific Gravity:
No information found.

pH:
No information found.

% Volatiles by volume @ 21C (70F):
0

Boiling Point:
No information found.

Melting Point:
No information found.

Vapor Density (Air=1):
Not applicable.
10. Stability and Reactivity

**Stability:**
Stable under ordinary conditions of use and storage.

**Hazardous Decomposition Products:**
May produce oxides of carbon and oxides of nitrogen when heated to decomposition.

**Hazardous Polymerization:**
Will not occur.

**Incompatibilities:**
Strong oxidizing agents.

**Conditions to Avoid:**
Incompatibles.

11. Toxicological Information

No LD50/LC50 information found relating to normal routes of occupational exposure.

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>NTP Carcinogen</th>
</tr>
</thead>
<tbody>
<tr>
<td>Murexide (3051-09-0)</td>
<td>No Known No Anticipated None</td>
</tr>
</tbody>
</table>

12. Ecological Information

**Environmental Fate:**
No information found.

**Environmental Toxicity:**
No information found.

13. Disposal Considerations

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

14. Transport Information

Not regulated.

15. Regulatory Information

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>TSCA</th>
<th>EC</th>
<th>Japan</th>
<th>Australia</th>
</tr>
</thead>
<tbody>
<tr>
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<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>
Ingredient | Korea | DSL | NDSL | Phil.
--- | --- | --- | --- | ---
Murexide (3051-09-0) | No | Yes | No | Yes

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Ingredient | RQ | TPQ | List | Chemical Catg.
--- | --- | --- | --- | ---
Murexide (3051-09-0) | No | No | No | No

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Ingredient | CERCLA | 261.33 | 8(d)
--- | --- | --- | ---
Murexide (3051-09-0) | No | No | No

Chemical Weapons Convention: No  
TSCA 12(b): No  
CDTA: No  
SARA 311/312: Acute: Yes  
Chronic: No  
Fire: No  
Pressure: No  
Reactivity: No  
(Pure / Solid)

**Australian Hazchem Code:** None allocated.  
**Poison Schedule:** None allocated.  
**WHIMIS:** This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

### 16. Other Information

**NFPA Ratings:** Health: 1  
Flammability: 0  
Reactivity: 0  

**Label Hazard Warning:**  
WARNING! TOXICOLOGICAL PROPERTIES UNKNOWN. MAY BE HARMFUL IF SWALLOWED, INHALED OR ABSORBED THROUGH SKIN. MAY CAUSE IRRITATION TO SKIN, EYES, AND RESPIRATORY TRACT.

**Label Precautions:**  
No SAF-T-DATA Ratings have been developed for this product. Read and follow all warnings, precautions, instructions and other safety and handling information on the label and MSDS.  
Avoid contact with eyes, skin and clothing.  
Avoid breathing dust.  
Keep container closed.  
Use with adequate ventilation.  
Wash thoroughly after handling.

**Label First Aid:**  
In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. If swallowed, give large amounts of water to drink. Never give anything by mouth to an unconscious person. In all cases, get medical attention.

**Product Use:**  
Laboratory Reagent.
Revision Information:
No Changes.

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