Material Safety Data Sheet
Pyridinium bromide perbromide

Section 1 - Chemical Product and Company Identification

MSDS Name: Pyridinium bromide perbromide
Catalog Numbers: 15836-0000, 15836-0050, 15836-1000, 15836-5000
Synonyms: Pyridine hydrobromide, compound with bromine

Company Identification:
Acros Organics BVBA
Janssen Pharmaceuticalaan 3a
2440 Geel, Belgium

Company Identification: (USA)
Acros Organics
One Reagent Lane
Fair Lawn, NJ 07410

For information in the US, call: 800-ACROS-01
For information in Europe, call: +32 14 57 52 11
Emergency Number, Europe: +32 14 57 52 99
Emergency Number US: 201-796-7100
CHEMTREC Phone Number, US: 800-424-9300
CHEMTREC Phone Number, Europe: 703-527-3887

Section 2 - Composition, Information on Ingredients

<table>
<thead>
<tr>
<th>CAS#</th>
<th>Chemical Name</th>
<th>%</th>
<th>EINECS#</th>
</tr>
</thead>
<tbody>
<tr>
<td>39416-48-3</td>
<td>Pyridinium bromide perbromide 95%</td>
<td>254-446-8</td>
<td></td>
</tr>
</tbody>
</table>

Hazard Symbols: C
Risk Phrases: 34

Section 3 - Hazards Identification

EMERGENCY OVERVIEW
Causes burns.

Potential Health Effects
Eye: Causes eye burns. Lachrymator (substance which increases the flow of tears).
Skin: Causes skin burns.
Ingestion: Causes gastrointestinal tract burns.
Inhalation: Causes chemical burns to the respiratory tract.

**Chronic:**

Section 4 - First Aid Measures

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

**Skin:** Get medical aid immediately. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

**Ingestion:** Do not induce vomiting. Get medical aid immediately.

**Inhalation:** Get medical aid immediately. Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

**Notes to Physician:** Treat symptomatically and supportively.

Section 5 - Fire Fighting Measures

**General Information:** As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear.

**Extinguishing Media:** Use foam, dry chemical, or carbon dioxide.

Section 6 - Accidental Release Measures

**General Information:** Use proper personal protective equipment as indicated in Section 8.

**Spills/Leaks:** Vacuum or sweep up material and place into a suitable disposal container.

Section 7 - Handling and Storage

**Handling:** Do not breathe dust, vapor, mist, or gas. Do not get in eyes, on skin, or on clothing. Use only in a chemical fume hood.

**Storage:** Store in a cool, dry place. Store in a tightly closed container. Corrosives area.

Section 8 - Exposure Controls, Personal Protection

**Engineering Controls:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

**Exposure Limits**

CAS# 39416-48-3:
Personal Protective Equipment

Eyes: Wear chemical splash goggles.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Section 9 - Physical and Chemical Properties

Physical State: Solid
   Color: red to brown
   Odor: Not available
   pH: Not available
   Vapor Pressure: Not available
   Viscosity: Not available
   Boiling Point: Not available
   Freezing/Melting Point: 127 - 133 deg C
   Autoignition Temperature: Not available
   Flash Point: Not available
   Explosion Limits: Lower: Not available
   Explosion Limits: Upper: Not available
   Decomposition Temperature: Not available
   Solubility in water: decomposes
   Specific Gravity/Density:
      Molecular Formula: C5H6Br3N
      Molecular Weight: 319.83

Section 10 - Stability and Reactivity

Chemical Stability: Not available
Conditions to Avoid: Incompatible materials, exposure to moist air or water.
Incompatibilities with Other: Water, strong oxidizing agents, strong bases.
Materials
Hazardous Decomposition Products
Carbon monoxide, oxides of nitrogen, carbon dioxide, hydrogen bromide, bromine.
Hazardous Polymerization
Has not been reported.

Section 11 - Toxicological Information
RTECS#: CAS# 39416-48-3: None listed
LD50/LC50: RTECS: Not available.
Pyridinium bromide perbromide - Not listed as a carcinogen by ACGIH, Carcinogenicity: IARC, NTP, or CA Prop 65.
Other: The toxicological properties have not been fully investigated.

Section 12 - Ecological Information
Not available

Section 13 - Disposal Considerations
Dispose of in a manner consistent with federal, state, and local regulations.

Section 14 - Transport Information

<table>
<thead>
<tr>
<th>IATA</th>
<th>IMO</th>
<th>RID/ADR</th>
</tr>
</thead>
<tbody>
<tr>
<td>CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S.*</td>
<td>CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S.</td>
<td>CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S.</td>
</tr>
<tr>
<td>Hazard Class: 8</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>UN Number: 3261</td>
<td>3261</td>
<td>3261</td>
</tr>
<tr>
<td>Packing Group: II</td>
<td>II</td>
<td>II</td>
</tr>
</tbody>
</table>

Section 15 - Regulatory Information
European/International Regulations
European Labeling in Accordance with EC Directives
Hazard Symbols: C
Risk Phrases:
R 34 Causes burns.
Safety Phrases:
S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
S 45 In case of accident or if you feel unwell, seek medical advice immediately
WGK (Water Danger/Protection)
CAS# 39416-48-3: Not available

Canada
CAS# 39416-48-3 is listed on Canada's NDSL List

US Federal
TSCA
CAS# 39416-48-3 is listed on the TSCA Inventory.

Section 16 - Other Information
MSDS Creation Date: 7/16/1996
Revision #1 Date 8/06/2004
Revisions were made in Sections: General revision.

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.

---------------------------------------------------------------------------------------------------------