MATERIAL SAFETY DATA SHEET

PICRIC ACID, SATURATED

SECTION I

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SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

NAME: PICRIC ACID, SATURATED

COMPONENTS:
(1) picric acid, 4%
(2) water, balance

CAS: 88-89-1
7732-18-5

FORMULA/F.WT.: C6H3O7N3/229.11
H2O/18.00

NFPA RATING (0-4):
(1) Health-3
Fire-4
Reactivity-4

SECTION III - PHYSICAL AND CHEMICAL CHARACTERISTICS

Boiling pt: >100C
Melting pt: <0C
Sp. gravity: >1
Evaporation rate: n/a
Dissolving: soluble in water.
Vapor press: n/a
Vapor density: n/a
pH: acidic

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flash pt: n/a
Explosion level-lower(LEL): n/a
-upper(UEL): n/a
Autoignition: n/a
Extinguishing Media: dry chemical, carbon dioxide, water spray, foam.

SECTION V - REACTIVITY DATA

Stability: stable at normal temperatures and pressures.
Condition to Avoid: Do not allow to become dry. Picric acid will explode under certain conditions.

Hazardous Decomposition/Byproducts: combustion products include toxic oxides of carbon and nitrogen.

Hazardous Polymerization: not known to occur.

SECTION VI - HEALTH HAZARD DATA

Toxicity: picric acid--LDLO: 120mg/Kg oral-rabbit; 100mg/Kg oral-guinea pig; mutagenic data (RTECS).

Carcinogenicity: not classified by OSHA, IARC, NTP.
Exposure Limits:

<table>
<thead>
<tr>
<th>OSHA-PEL:</th>
<th>ACGIH-TWA:</th>
<th>STEL:</th>
<th>TLV CEILING:</th>
<th>IDLH:</th>
<th>NIOSH-TWA:</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.1mg/M3</td>
<td>0.1mg/M3</td>
<td>0.3mg/M3</td>
<td>n/a</td>
<td>75mg/M3</td>
<td>0.3mg/M3</td>
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Acute Health Hazards: may cause irritation to the respiratory tract, nose, throat, skin, eyes, gastrointestinal tract.

Chronic Health Hazards: repeated inhalation may cause yellowing of the teeth, skin. Prolonged skin contact may cause dermatitis. Prolonged eye contact may cause conjunctivitis. Repeated ingestion may cause liver, kidney damage.

First Aid:

Inhalation: move victim to fresh air, give artificial respiration if necessary. Keep warm, at rest. Get medical aid at once.

Skin: remove contaminated clothing, wash area with soap and water. Flush with large amounts of water for 15-20min. Get medical aid at once.

Eyes: immediately wash with large amounts of water for 15-20min. Get medical aid at once.

Ingestion: GET MEDICAL ATTENTION IMMEDIATELY. Induce vomiting in conscious victim (ipecac or touch finger to back of throat). Give sodium bicarbonate (baking soda), 2 teaspoons in glass of water.

SECTION VII - PRECAUTION FOR SAFE HANDLING AND USE

Spills or Leaks: contain if possible, prevent run-off into drains and sewers. Shut off ignition sources, provide ventilation, wear respiratory protection. Absorb with sand or other non-combustible material, scoop into suitable container labelled "flammable".

Disposal: dispose in accordance with Federal, State, and local regulations.

Storage and handling: store as heat/ignition protected flammable, away from oxidizers and other incompatibles.

SECTION VIII - CONTROL MEASURES

Respiratory Protection: use local exhaust or general dilution ventilation to meet Permissible Exposure Limits (PEL). Ventilation equipment must be explosion-proof. Use supplied air (SA) respirators or self-contained breathing apparatus (SCBA) at 2000ppm; SA or SCBA with Facepiece at 10,000ppm; above 10,000ppm use type C. SAF in positive pressure/continuous flow mode; pos press. SCBA for escape.

Protective Clothing and Equipment: wear protective clothing, gloves, and splash-proof goggles. Provide an eye-wash fountain in the immediate work area. Do not wear contact lenses when working with chemicals.

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[Note: n/a means "not applicable" or data "not available".]