Picric Acid-Acetone Solution

1. Identification

Product Name: Picric Acid-Acetone Solution
Item #: RS4437-500

Synonyms: N/A

Recommended Use: N/A

Restrictions on Use: N/A

Manufacturer/Supplier:
Avantik
32 Commerce Street
Springfield, NJ 07081
(800) 783-9424

In Case of Emergency:
Chemtrec US 1-800-424-9300

2. Hazards Identification

OSHA Hazard Classification(s):
- Flammable Liquids - Category 2
- Skin Irritation - Category 2
- Sensitization - Skin - Category 1B

Signal Word: Danger

Hazard Statement(s):
Highly flammable liquid and vapor. Causes skin irritation. May cause an allergic skin reaction.

Pictogram(s):

Precautionary Statement(s):
Prevention: Keep away from heat sources and open flame. No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical, ventilating, lighting and equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Wash body thoroughly after handling. Wear protective gloves. Avoid breathing dust, vapors. Contaminated work clothing must not be allowed out of the workplace.

Response: If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. In case of fire: Use water, dry chemical, CO2 or foam to extinguish. If on skin: Wash with plenty of water. Specific treatment (see first aid section on this label). If skin irritation or rash occurs: Get medical attention. Take off all contaminated clothing and wash it before reuse.

Storage: Store in a well-ventilated place. Keep cool.

Disposal: Dispose of contents/container in accordance with local regulations.

Descriptions of Hazards not otherwise classified: N/A

Percent of mixture with unknown acute toxicity: N/A

3. Composition and Information on Ingredients

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Common Name</th>
<th>CAS #</th>
<th>Concentration %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetone</td>
<td>67-64-1</td>
<td>Trade Secret</td>
<td></td>
</tr>
<tr>
<td>Picric Acid</td>
<td>88-89-1</td>
<td>Trade Secret</td>
<td></td>
</tr>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>Trade Secret</td>
<td></td>
</tr>
</tbody>
</table>

4. First Aid Measures

Eye Contact: If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Skin Contact: If on skin (or hair): Take off immediately all contaminated clothing and wash before reuse. Wash with plenty of water. If skin irritation occurs: Get medical advice/attention.

Inhalation: Remove to fresh air; give artificial respiration if breathing has stopped. Get medical advice/attention if you feel unwell.

Ingestion: Do not induce vomiting. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into the lungs. Get medical attention.
Symptoms: Irritation eyes, nose, throat; headache, dizziness, central nervous system depression; dermatitis.
Recommendations for immediate medical care/special treatment: Get medical advice/attention if you feel unwell. Health effects on the following organs: eye, skin, respiratory system, central nervous system.

5. Fire- Fighting Measures
Extinguishing Media: Dry chemical, carbon dioxide, alcohol foam, water. Use water spray to cool fire-exposed containers and disperse vapors.
Fire Hazards (Chemical): OSHA classified Flammable Liquid Category 2
Special Protective Equipment: Fire fighters should use self-contained breathing apparatus and protective clothing.
Precautions for Firefighters: Fire fighters should use self-contained breathing apparatus and protective clothing.

6. Accidental Release Measures
Emergency Procedures: Evacuate the area of all unnecessary personnel. Wear suitable protective equipment. Eliminate all sources of ignition and provide ventilation.
Protective Equipment: See section 8
Environmental Precautions: Prevent release to the environment by using barriers.

7. Handling and Storage
Handling: Do not breathe vapors. Do not eat, drink or smoke when using this product. Keep away from heat, sparks, open flames, hot surfaces. Keep container tightly closed. Ground/Bond container and receiving equipment. Use explosion-proof electrical, ventilating, and lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge.

8. Exposure Controls/Personal Protection
OSHA Permissible Exposure Limits (PELs):

<table>
<thead>
<tr>
<th>Reagent</th>
<th>CAS #</th>
<th>OSHA PEL TWA</th>
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</thead>
<tbody>
<tr>
<td>Acetone</td>
<td>67-64-1</td>
<td>1000ppm</td>
</tr>
<tr>
<td>Picric Acid</td>
<td>88-89-1</td>
<td>0.1 mg/m3 [skin]</td>
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</tbody>
</table>

ACGIH Threshold Limit Values (TLVs):

<table>
<thead>
<tr>
<th>Reagent</th>
<th>CAS #</th>
<th>ACGIH PEL TLV</th>
<th>ACGIH STEL</th>
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<tbody>
<tr>
<td>Acetone</td>
<td>67-64-1</td>
<td>500ppm</td>
<td>750ppm</td>
</tr>
<tr>
<td>Picric Acid</td>
<td>88-89-1</td>
<td>0.1 mg/m3 TWA</td>
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</table>

Engineering Controls: Use in a well ventilated area to prevent exposure. Maintain eyewash fountain and quick-drench facilities in work areas.
Personal Protective Measures: Wear gloves, lab coat, eye protection and impervious footwear. Contact lenses should not be worn when working with this material.
Special PPE Requirements: If ventilation hood not available wear respirator.

9. Physical and Chemical Properties Section
Appearance: Yellow, Liquid
Molecular Weight: N/A
Molecular Formula: N/A
pH: N/A
Boiling Point and Boiling Range: N/A
Melting Point/Freezing Point: N/A
Picric Acid-Acetone Solution

Flash Point: N/A
Specific Gravity/Relative Density: N/A
Odor: N/A
Odor Threshold: N/A
Color: Yellow
Flammability (solid/gas): Flammable liquid
Vapor Density: N/A
Upper/Lower flammability or explosive limits: N/A
Vapor Pressure: N/A
Evaporation Rate: N/A
Partition Coefficient: n-octanol/water: N/A
Viscosity: N/A
Auto-ignition temperature: N/A
Solubility: N/A
Decomposition Temperature: N/A

10. Stability and Reactivity
Reactivity: N/A
Chemical Stability: Stable
Conditions of Stability/Instability: Instable under high heat.
Stabilizers needed: None
Safety issue indicated by appearance change: N/A
Other: N/A
Hazardous Reactions: N/A
Hazardous Polymerization: Does not occur
Conditions to avoid: N/A
Classes of Incompatible Materials: Oxidizers, Strong Acids, Strong Bases
Hazardous Decomposition Products: Thermal-oxidation degradation can produce oxides of carbon. Toxic gases and vapors (i.e. Carbon monoxide and ketene) may be released in a fire.

11. Toxicological Information
Likely Routes of Exposure
Eyes: Irritation.
Skin: Irritation.
Inhalation: Dizziness, headache, nausea, narcosis
Ingestion: Nausea.

Signs or Symptoms of Exposure: Nausea.
Effects from short term exposure (delayed, immediate, chronic): Irritation to the eyes, nose, throat; headache, dizziness, nausea.
Acute Toxicity (Numerical Measures): Acetone: LD50 (oral, rat)=5800mg/kg; LD50 (oral mouse)=3000 mg/kg; LC50 (rat)=20,702 ppm
Picric Acid: LD50(oral,guinea pig)=100 mg/kg, LD50(oral,rabbit)=120 mg/kg
Carcinogenicity (NTP, IARC, OSHA): Does not contain any known carcinogens.

12. Ecological Information
Ecotoxicity:
Persistence and degradability:
Bioaccumulation Potential (octanol-water partition coefficient, BCF):
Mobility in the soil:
Adverse Environmental Effects:

13. Disposal Considerations
Recommended Disposal Containers: Check with your local waste authorities.
Recommended Disposal Methods: Do not dispose of in drains, check with your local waste authorities.
Physical/Chemical Properties affecting Disposal: See section 2 and section 9 applicable information.
Special Precautions for Landfill and Incineration Activities: Check with your local waste authorities.
Waste Stream: Consult your local or regional authorities.

14. Transport Information
UN Number: UN1090
UN Proper Shipping Name: Acetone
Transport Hazard Class(es): 3
Packing Group Number: II
Environmental Hazards (IMDG code):
Marine Pollutant: No
Transport in Bulk (IBC Code): N/A
Special Transport Precautions: N/A

15. Regulatory Information
OSHA:
DOT:
EPA:
CPSC:
16. Other Information

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<th>National Fire Protection Association (USA) NFPA</th>
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<tr>
<td>Fire Hazard</td>
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</tr>
<tr>
<td>Reactivity</td>
<td>2</td>
</tr>
<tr>
<td>Specific Hazard</td>
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<thead>
<tr>
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<td>Health</td>
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<tr>
<td>Flammability</td>
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<tr>
<td>Physical Hazard</td>
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<tr>
<td>Personal Protection</td>
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