1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product name : Picric acid solution

Product Number : 80456
Brand : Fluka
Company : Sigma-Aldrich
3050 Spruce Street
SAINT LOUIS MO  63103
USA
Telephone : +18003255832
Fax : +18003255052
Emergency Phone # : (314) 776-6555

2. HAZARDS IDENTIFICATION

Not a hazardous substance or preparation according to EC-directives 67/548/EEC or 1999/45/EC.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms : 2,4,6-Trinitrophenol
Formula : C₆H₃N₃O₇

<table>
<thead>
<tr>
<th>CAS-No.</th>
<th>EC-No.</th>
<th>Index-No.</th>
<th>Classification</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Picric Acid</td>
<td>88-89-1</td>
<td>201-865-9</td>
<td>609-009-00-X</td>
<td>E, T, R 2 - R 4 - R23/24/25</td>
</tr>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>231-791-2</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

For the full text of the R-phrases mentioned in this Section, see Section 16.

4. FIRST AID MEASURES

If inhaled
If breathed in, move person into fresh air. If not breathing give artificial respiration

In case of skin contact
Wash off with soap and plenty of water.

In case of eye contact
Flush eyes with water as a precaution.

If swallowed
Never give anything by mouth to an unconscious person. Rinse mouth with water.
5. FIRE-FIGHTING MEASURES

Suitable extinguishing media
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special protective equipment for fire-fighters
Wear self contained breathing apparatus for fire fighting if necessary.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions
Avoid breathing vapors, mist or gas.

Environmental precautions
Do not let product enter drains.

Methods for cleaning up
Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Handling
Normal measures for preventive fire protection.

Storage
Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Personal protective equipment

Respiratory protection
Respiratory protection is not required. Where protection is desired, use multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection
For prolonged or repeated contact use protective gloves.

Eye protection
Face shield and safety glasses

Hygiene measures
General industrial hygiene practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance
Form Aqueous solution

Safety data
pH no data available
Melting point no data available
Boiling point no data available
Flash point no data available
Ignition temperature no data available
Lower explosion limit no data available
Upper explosion limit no data available
10. STABILITY AND REACTIVITY

**Storage stability**
Stable under recommended storage conditions.

**Materials to avoid**
Strong oxidizing agents, Strong bases, Reducing agents, Heavy metals, Heavy metal salts, Ammonia

**Hazardous decomposition products**
Hazardous decomposition products formed under fire conditions. - Carbon oxides, nitrogen oxides (NOx)
Hazardous decomposition products formed under fire conditions. - Carbon oxides, nitrogen oxides (NOx)

11. TOXICOLOGICAL INFORMATION

**Acute toxicity**
no data available

**Irritation and corrosion**
no data available

**Sensitisation**
May cause allergic skin reaction.

**Chronic exposure**
IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

**Potential Health Effects**

| Inhalation | May be harmful if inhaled. May cause respiratory tract irritation. |
| Skin       | May be harmful if absorbed through skin. May cause skin irritation. |
| Eyes       | May cause eye irritation. |
| Ingestion  | May be harmful if swallowed. |
| Target Organs | Liver, Kidney, Blood, |

12. ECOLOGICAL INFORMATION

**Elimination information (persistence and degradability)**
no data available

**Ecotoxicity effects**
no data available

**Further information on ecology**
no data available

13. DISPOSAL CONSIDERATIONS

**Product**
Observe all federal, state, and local environmental regulations.

**Contaminated packaging**
Dispose of as unused product.

14. TRANSPORT INFORMATION
15. REGULATORY INFORMATION

Labelling according to EC Directives
Safety datasheet available on request for professional users.

16. OTHER INFORMATION

Text of R-phrases mentioned in Section 3

<table>
<thead>
<tr>
<th>R</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>R 2</td>
<td>Risk of explosion by shock, friction, fire or other sources of ignition.</td>
</tr>
<tr>
<td>R 4</td>
<td>Forms very sensitive explosive metallic compounds.</td>
</tr>
<tr>
<td>R23/24/25</td>
<td>Toxic by inhalation, in contact with skin and if swallowed.</td>
</tr>
</tbody>
</table>

Further information
Copyright 2009 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only. The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Co., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale.