



## Safety Data Sheet

### SECTION 1: Identification

#### 1.1. Product Identifier

**Trade Name or Designation:** Picric Acid Solution, Saturated, for AOAC Method 920.106  
for Gelatin in Milk and Milk Products, Qualitative Test

**Product Number:** SP9200

**Other Identifying Product Numbers:** SP9200-100, SP9200-50

#### 1.2. Recommended Use and Restrictions on Use

General Laboratory Reagent

#### 1.3. Details of the Supplier of the Safety Data Sheet

**Company:** Fisher Scientific

**Address:** 300 Industry Drive  
Pittsburgh, PA 15275 USA

**Telephone:**

#### 1.4. Emergency Telephone Number (24 hr)

CHEMTREC (USA) 800-424-9300  
CHEMTREC (International) 1+ 703-527-3887

### SECTION 2: Hazard(s) Identification

#### 2.1. Classification of the Substance or Mixture (in accordance with OSHA HCS 29 CFR 1910.1200)

*For the full text of the Hazard and Precautionary Statements listed below, see Section 16.*

Hazard Class	Category	Hazard Statement	Precautionary Statements
Skin Sensitizer	Category 1	H317	P261, P272, P280, P302+P352, P332+P313, P321, P363, P501

#### 2.2. GHS Label Elements

**Pictograms:**



**Signal Word:** **Warning**



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### Hazard Statements:

Hazard Number	Hazard Statement
H317	May cause an allergic skin reaction.

### Precautionary Statements:

Precautionary Number	Precautionary Statement
P261	Avoid breathing dust, fumes or mist.
P272	Contaminated work clothing must not be allowed out of the workplace.
P280	Wear protective gloves and eye protection.
P302+P352	IF ON SKIN: Wash with plenty of soap and water.
P321	Specific treatment (Wash areas of contact with water).
P332+P313	If skin irritation occurs: Get medical attention.
P363	Wash contaminated clothing before reuse.
P501	Dispose of contents in accordance with local, state, federal and international regulations.

### 2.3. WHMIS Classification

WHMIS classification is not included based on the recommended option (Option 4) found in the Canada Gazette Part II, Vol. 149, No.3, page 458

### 2.4. Hazards not Otherwise Classified or Covered by GHS

Data not available.

## SECTION 3: Composition / Information on Ingredients

### 3.1. Components of Substance or Mixture

Chemical Name	Formula	Molecular Weight	CAS Number	Weight%
Water	H <sub>2</sub> O	18.01 g/mol	7732-18-5	99.09%
Picric Acid	(O <sub>2</sub> N) <sub>3</sub> C <sub>6</sub> H <sub>2</sub> OH	229.10 g/mol	88-89-1	0.91%

## SECTION 4: First-Aid Measures

### 4.1. General First Aid Information

**Eye Contact:** May cause irritation, redness, pain, and tearing.

**Inhalation:** Not expected to require first aid. If necessary, remove to fresh air.

**Skin Contact:** IF ON SKIN: Wash with plenty of soap and water. May be absorbed through the skin. May cause irritation, allergic reaction and symptoms similar to inhalation. Will stain areas of contact. Stains may be removed using Reagent Alcohol or dilute Ammonium Hydroxide Solution.



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**Ingestion:** Dilute immediately with water or milk. Vomiting may occur spontaneously, but DO NOT INDUCE. If vomiting occurs, keep head below hips to prevent aspiration into lungs. Call a physician immediately.

### 4.2. Most Important Symptoms and Effects, Acute and Delayed

The greatest hazard associated with these solutions occurs if the Picric Acid were allowed to dry completely. Picric Acid may detonate if allowed to dry completely. May be absorbed through the skin. Wash areas of contact with plenty of water. If ingested, dilute with water. Aspiration hazard, do not induce vomiting. Call a physician if necessary.

**EYE CONTACT:** May cause irritation, redness, pain, and tearing. **SKIN CONTACT:** May be absorbed through the skin. May cause irritation, allergic reaction and symptoms similar to inhalation. Will stain areas of contact. Stains may be removed using Reagent Alcohol or dilute Ammonium Hydroxide Solution.

### 4.3. Medical Attention or Special Treatment Needed

Specific treatment (Wash areas of contact with water).

## SECTION 5: Fire-Fighting Measures

### 5.1. Extinguishing Media

Use any means suitable for extinguishing surrounding fire (Water, water spray, foam, or dry chemical). If using water, do not allow water run off to enter sewer.

### 5.2. Specific Hazards Arising from the Substance or Mixture

Picric Acid raw material is explosive. Picric Acid can decompose explosively in a fire. It forms salts (picrates) rather easily and many of its salts are more sensitive explosives than Picric Acid itself.

### 5.3. Special Protective Equipment for Firefighters

Use protective clothing and breathing equipment appropriate for the surrounding fire.

## SECTION 6: Accidental Release Measures

### 6.1. Personal Precautions, Protective Equipment and Emergency Procedures

Wear protective gloves and eye protection.

### 6.2. Cleanup and Containment Methods and Materials

Absorb the spill with Sodium Bicarbonate or a soda ash-sand mixture (10:90). Containerize for proper disposal. Wash site with soda ash solution. Always dispose of in accordance with local regulations.

## SECTION 7: Handling and Storage

### 7.1. Precautions for Safe Handling and Storage Conditions

As with all chemicals, wash hands thoroughly after handling. Avoid contact with eyes and skin. Protect from freezing and physical damage. Do not allow this material to dry out. Do not let dry picric acid (crystals) form in container or on the cap threads of container. Keep away from heat. Keep away from sources of ignition. Keep away from direct sunlight or strong incandescent light. Ground all equipment containing material. Empty containers may contain hazardous residue and pose a fire risk. Do not ingest. Do not breathe dust. Take precautionary measures against electrostatic discharges. Avoid shock and friction.



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### SECTION 8: Exposure Controls / Personal Protection

#### 8.1. Control Parameters

Chemical Name	Limit Type	Country	Exposure Limit	Information Source
Picric Acid (88-89-1)	TWA	USA	0.1 mg/m <sup>3</sup> TWA	U.S. - OSHA - Final PELs - Time Weighted Averages (TWAs)
Picric Acid (88-89-1)	TLV-TWA	USA	0.1 mg/m <sup>3</sup> TWA	ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA)

#### 8.2. Exposure Controls

**Engineering Controls:** No specific controls are needed. Normal room ventilation is adequate.

**Respiratory Protection:** Normal room ventilation is adequate.

**Skin Protection:** Wear protective gloves and eye protection. Chemical resistant gloves.

**Eye Protection:** Wear protective gloves and eye protection. Safety glasses or goggles.

#### 8.3. Personal Protective Equipment

Wear protective gloves and eye protection. Normal room ventilation is adequate. Chemical resistant gloves. Safety glasses or goggles.



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### SECTION 9: Physical and Chemical Properties

#### 9.1. Basic Physical and Chemical Properties

**Appearance:** Yellow liquid

**Physical State:** Liquid

**Odor:** Data not available.

**Odor Threshold:** Data not available.

**pH:** Data not available.

**Melting/Freezing Point:** 0.0°C

**Initial Boiling Point /Range:** 100°C - 100°C

**Flash Point:** Data not available.

**Evaporation Rate:** Data not available.

**Flammability:** Data not available.

**Flammability/Explosive Limits:** Data not available.

**Vapor Pressure:** Data not available.

**Vapor Density:** Data not available.

**Relative Density:** 1.0

**Solubility:** Miscible

**Partition Coefficient (n-Octanol/Water):** Data not available.

**Auto-Ignition Temperature:** Data not available.

**Decomposition Temperature:** Data not available.

**Viscosity:** Data not available.

**Explosive Properties:** Data not available.

**Oxidizing Properties:** Data not available.

### SECTION 10: Stability and Reactivity

#### 10.1. Reactivity and Chemical Stability

Stable under normal conditions of use and storage.

#### 10.2. Possibility of Hazardous Reactions

Data not available.

#### 10.3. Conditions to Avoid and Incompatible Materials

Copper, Lead, Zinc, other metals and metal salts, plaster, concrete.

#### 10.4. Hazardous Decomposition Products

Will not occur.



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### SECTION 11: Toxicological Information

#### 11.1. Information on Toxicological Effects

**Acute Toxicity - Oral Exposure:**

Not applicable.

**Acute Toxicity - Dermal Exposure:**

Not applicable.

**Acute Toxicity - Inhalation Exposure:**

Not applicable.

**Acute Toxicity - Other Information:**

LD50, Oral, Rat: 200 mg/kg (Picric Acid), behavioral and sense organ (eye) effects noted.

**Skin Corrosion and Irritation:**

Not applicable.

**Serious Eye Damage and Irritation:**

Not applicable.

**Respiratory Sensitization:**

Not applicable.

**Skin Sensitization:**

May cause an allergic skin reaction. Avoid breathing dust, fumes or mist. Contaminated work clothing must not be allowed out of the workplace. Wear protective gloves and eye protection. IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical attention. Specific treatment (Wash areas of contact with water). Wash contaminated clothing before reuse. Dispose of contents in accordance with local, state, federal and international regulations.

**Germ Cell Mutagenicity:**

Not applicable.

**Carcinogenicity:**

Not applicable.

**Reproductive Toxicity:**

Not applicable.

**Specific Target Organ Toxicity from Single Exposure:**

Not applicable.

**Specific Target Organ Toxicity from Repeated Exposure:**

Not applicable.

**Aspiration Hazard:**

Not applicable.

**Additional Toxicology Information:**

Data not available.



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### SECTION 12: Ecological Information

#### 12.1. Ecotoxicity

Not applicable.

#### 12.2. Persistence and Degradability

Data not available.

#### 12.3. Bioaccumulative Potential

Data not available.

#### 12.4. Mobility in Soil

Data not available.

#### 12.5. Other Adverse Ecological Effects

Data not available.

### SECTION 13: Disposal Considerations

#### 13.1. Waste Treatment Methods

Data not available.

### SECTION 14: Transportation Information

#### 14.1. Transportation by Land - Department of Transportation (DOT, United States of America)

Not regulated according to DOT Regulations.



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Not regulated according to IATA Regulations.

### SECTION 15: Regulatory Information

#### 15.1. Occupational Safety and Health Administration (OSHA) Hazards

Not listed.

#### 15.2. Superfund Amendments and Reauthorization Act (SARA) 302 Extremely Hazardous Substances

Not listed.

#### 15.3. Superfund Amendments and Reauthorization Act (SARA) 311/312 Hazardous Chemicals

Not listed.

#### 15.4. Superfund Amendments and Reauthorization Act (SARA) 313 Toxic Release Inventory (TRI)

Picric Acid (CAS # 88-89-1): 1.0 % de minimis concentration

#### 15.5. Massachusetts Right-to-Know Substance List

Picric Acid (CAS # 88-89-1): Present

#### 15.6. Pennsylvania Right-to-Know Hazardous Substances

Water (CAS # 7732-18-5): Present

Picric Acid (CAS # 88-89-1): Environmental hazard

Picric Acid (CAS # 88-89-1): Present

#### 15.7. New Jersey Worker and Community Right-to-Know Components

Picric Acid (CAS # 88-89-1): flammable - fourth degree; reactive - fourth degree

Picric Acid (CAS # 88-89-1): sn 1946

Picric Acid (CAS # 88-89-1): SN 1946 500 lb TPQ (dry or wetted with less than 30 percent water, by mass)

#### 15.8. California Proposition 65

Not listed.

#### 15.9. Canada Domestic Substances List / Non-Domestic Substances List (DSL/NDSL)

Water (CAS # 7732-18-5): Present (DSL)

Picric Acid (CAS # 88-89-1): Present (DSL)





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### 15.10. United States of America Toxic Substances Control Act (TSCA) List

Water (CAS # 7732-18-5): Present

Picric Acid (CAS # 88-89-1): Present

### 15.11. European Inventory of Existing Commercial Chemical Substances (EINECS),

European List of Notified Chemical Substances (ELINCS), and No Longer Polymers (NLP)

Not listed.

## SECTION 16: Other Information

### 16.1. Full Text of Hazard Statements and Precautionary Statements

May cause an allergic skin reaction.

Avoid breathing dust, fumes or mist. Contaminated work clothing must not be allowed out of the workplace. Wear protective gloves and eye protection.

IF ON SKIN: Wash with plenty of soap and water. Specific treatment (Wash areas of contact with water). If skin irritation occurs: Get medical attention. Wash contaminated clothing before reuse.

Dispose of contents in accordance with local, state, federal and international regulations.

### 16.2. Miscellaneous Hazard Classes

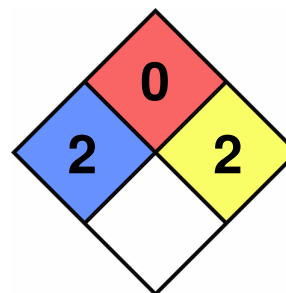
**Canadian Carcinogenicity Hazard Class:** Not Applicable.

**Physical Hazards Not Otherwise Classified (PHNOC):** Not Applicable.

**Health Hazards Not Otherwise Classified (HHNOC):** Category 1  
Not Applicable.

### 16.3. National Fire Protection Association (NFPA) Rating

**Health:** 2  
**Flammability:** 0  
**Reactivity:** 2  
**Special Hazard:**





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### 16.4. Document Revision

Last Revision Date: 5/4/2015

#### DISCLAIMER

When handled properly by qualified personnel, the product described herein does not present a significant health or safety hazard. Alteration of its characteristics by concentration, evaporation, addition of other substances, or other means may present hazards not specifically addressed herein and which must be evaluated by the user. The information furnished herein is believed to be accurate and represents the best data currently available to us. No warranty, expressed or implied, is made and FISHER SCIENTIFIC assumes no legal responsibility or liability whatsoever resulting from its use.