



Safety Data Sheet

Classified According to OSHA Hazard Communication Standard (HCS 2024)

SECTION 1: Identification

1.1. Product Identifier

Trade Name or Designation Picric Acid, Reagent Grade

For safety in transportation, Picric Acid is usually mixed with a minimum of 30% water.

Product Number RDCP0300

Other Identifying Product Numbers RDCP0300-10C1, RDCP0300-125A6, RDCP0300-25C1, RDCP0300-500B1

1.2. Recommended Use and Restrictions on Use

General Laboratory Reagent

1.3. Details of the Supplier of the Safety Data Sheet

Company Ricca Chemical Company

Address 412 West Fork Drive

Arlington, TX 76012 USA

Telephone 888-467-4222

1.4. Emergency Telephone Number (24 hours)

CHEMTREC (USA) 800-424-9300

CHEMTREC (International) 1+ 703-527-3887

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SECTION 2: Hazard(s) Identification

2.1. Classification of the Substance or Mixture

Hazard Class	Category	Hazard Statements	Precautionary Statements
Acute Toxicity - Oral	Category 4	H302	P264,P270,P301+P312,P330,P501
Acute Toxicity - Dermal	Category 3	H311	P280,P302+P352,P312,P321, P361+P364,P405,P501
Acute Toxicity - Inhalation (Dusts and Mists)	Category 4	H332	P261,P271,P304+P340,P312
Skin Corrosion / Irritation	Category 1	H314	P260,P264,P280,P301+P330+P331, P303+P361+P353,P363,P304+P340, P310,P321,P305+P351+P338,P405, P501
Serious Eye Damage / Eye Irritation	Category 1	H318	P280,P305+P351+P338,P310
Skin Sensitization	Category 1	H317	P261,P272,P280,P302+P352, P333+P313,P321,P362+P364,P501
Desensitized Explosives	Category 1	H206	P210,P212,P230,P233,P280, P370+P380+P375,P401,P501
Combustible Dust	Category 1 - Combustible		

2.2. GHS Label Elements

Pictograms:



Signal Word: **Danger**

Hazard Statements:

NOTE: Hazard statements may be combined on labels to improve clarity and readability.

Hazard Number	Hazard Statement
H206	Fire, blast or projection hazard; increased risk of explosion if desensitizing agent is reduced
H302+H332	Harmful if swallowed or if inhaled
H311	Toxic in contact with skin
H314	Causes severe skin burns and eye damage
H317	May cause an allergic skin reaction
	May form combustible dust concentrations in air

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Precautionary Statements:

NOTE: Precautionary statements may be combined or consolidated on labels to improve clarity and readability.

Prevention

Precautionary Number	Precautionary Statement
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P212	Avoid heating under confinement or reduction of the desensitizing agent.
P230	Keep wetted with water.
P233	Keep container tightly closed.
P260	Do not breathe dust.
P264	Wash hands, arms, and face thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P272	Contaminated work clothing must not be allowed out of the workplace.
P280	Wear protective gloves and eye protection.

Response

Precautionary Number	Precautionary Statement
P301+P312	IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a poison center or doctor.
P330	Rinse mouth.
P333+P313	If skin irritation or rash occurs: Get medical advice or attention.
P361+P364	Take off immediately all contaminated clothing and wash it before reuse.
P370+P380+P375	In case of fire: Evacuate area. Fight fire remotely due to the risk of explosion.

Storage

Precautionary Number	Precautionary Statement
P401	Store in accordance with local regulations
P405	Store locked up.

Disposal

Precautionary Number	Precautionary Statement
P501	Dispose of contents/container to suitable waste stream in accordance with local, state, federal, and international regulations.

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2.3. Hazards not Otherwise Classified

No other hazards identified.

2.4. Ingredients of Unknown Acute Toxicity

This product does not contain any ingredients of unknown acute toxicity.

SECTION 3: Composition / Information on Ingredients

3.1. Components of Mixture

Chemical Name (IUPAC)	Common Name and Synonyms	CAS Number	Weight%
water	Water	7732-18-5	51.00
2,4,6-trinitrophenol	Picric Acid	88-89-1	49.00

SECTION 4: First-Aid Measures

4.1. Description of Necessary Measures

Eye Contact: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. May cause irritation, redness, pain, and tearing.

Ingestion: IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell. 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.

Inhalation: IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Skin Contact: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. 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.

4.2. Most Important Symptoms and Effects, Acute and Delayed

Toxic in contact with skin **WARNING!** Explosive if allowed to dry completely. Wash any residue on the container with water prior to opening. For safety in transportation, this material is packed with a minimum of 30% water. May cause irritation to all areas of contact. Can be absorbed through the skin. Wash areas of contact with plenty of water. Aspiration hazard. If ingested, do NOT induce vomiting. Give large quantity of water and call a physician. **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. Immediate Medical Attention or Special Treatment Needed

Immediately call a poison center or doctor. Irrigate immediately with large quantity of water for at least 15 minutes. Call a physician if irritation develops. Remove to fresh air. Give artificial respiration if necessary. If breathing is difficult, give oxygen. Flush with plenty of water for at least 15 minutes. Call a physician if irritation develops. 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.

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SECTION 5: Fire-Fighting Measures

5.1. Extinguishing Media

In case of fire: Evacuate area. Fight fire remotely due to the risk of explosion. Use water or water spray on small fires. Do not use dry chemicals or carbon dioxide.

5.2. Specific Hazards Arising from the Substance or Mixture in a Fire

Flammable solid. Explodes above 572 °F (300 °C) with release of oxides of nitrogen. Closed containers may rupture violently when heated.

5.3. Special Protective Equipment and Precautions for Firefighters

Wear special protective clothing and positive pressure self-contained breathing apparatus.

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

Prompt cleanup and removal are necessary. During cleanup, avoid shock, friction, or heat. With extreme caution, Shovel into suitable dry container.

SECTION 7: Handling and Storage

7.1. Precautions for Safe Handling and Storage Conditions

Store in accordance with local regulations Store locked up. 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.

SECTION 8: Exposure Controls / Personal Protection

8.1. Exposure Limits

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U.S. OSHA - Permissible Exposure Limits (PEL) - Time Weighted Averages (TWA)

Chemical Name	CAS Number	Exposure Limit
Picric Acid	88-89-1	0.1 mg/m3 TWA

U.S. OSHA - Permissible Exposure Limits (PEL) - Ceiling Limits

No limits found.

U.S. OSHA - Permissible Exposure Limits (PEL) - Short Term Exposure Limits (STEL)

No limits found.

U.S. OSHA - Specifically Regulated Chemicals

No limits found.

ACGIH - Threshold Limit Values - Ceilings (TLV-C)

No limits found.

ACGIH - Threshold Limit Values - Short Term Exposure Limits (TLV-STEL)

No limits found.

ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA)

Chemical Name	CAS Number	Exposure Limit
Picric Acid	88-89-1	0.1 mg/m3 TWA

8.2. Engineering Controls

Use only outdoors or in a well-ventilated area. No specific controls are needed. Normal room ventilation is adequate.

8.3. Individual Protective Measures and Personal Protective Equipment

Respiratory Protection: Normal room ventilation is adequate.

Skin Protection: Chemical resistant gloves.

Eye Protection: Safety glasses or goggles.

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SECTION 9: Physical and Chemical Properties

9.1. Basic Physical and Chemical Properties

Physical State:	Solid
Color:	Yellow slurry
Odor:	Data not available.
Odor Threshold:	Data not available.
Melting/Freezing Point:	Data not available.
Boiling Point/Range:	>300 °C (explodes)
Flammability:	Data not available.
Flammability/Explosive Limits:	Data not available.
Flash Point:	150°C
Auto-Ignition Temperature:	Data not available.
Decomposition Temperature:	Data not available.
pH:	N/A
Kinematic Viscosity:	Data not available.
Solubility:	miscible
Vapor Pressure:	Data not available.
Evaporation Rate:	Data not available.
Relative Density:	1.77
Relative Vapor Density:	Data not available.
Particle Characteristics:	Data not available.
Partition Coefficient n-octanol/water, log	Data not available.

SECTION 10: Stability and Reactivity

10.1. Reactivity and Chemical Stability

Stable under normal conditions of use and storage. Very unstable if allowed to dry completely.

10.2. Possibility of Hazardous Reactions

Data not available.

10.3. Conditions to Avoid and Incompatible Materials

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep wetted with water. Keep container tightly closed. Copper, Lead, Zinc, oxidizable substances, 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:

Oral acute toxicity estimate (ATE): 408 mg/kg(calculated)

Chemical Name	CAS Number	Toxicity
Picric Acid	88-89-1	Oral LD50 Rat 200 mg/kg (Source: NZ_CCID)

Acute Toxicity - Dermal Exposure:

Dermal acute toxicity estimate (ATE): 612 mg/kg(calculated)

Chemical Name	CAS Number	Toxicity
Picric Acid	88-89-1	Dermal LD50 Acute Toxicity Estimate 300 mg/kg (Source: ECHA)

Acute Toxicity - Inhalation Exposure:

Inhalation acute toxicity estimate (ATE, dust or mist): 1.0204 mg/L, 4 h(calculated)

Chemical Name	CAS Number	Toxicity
Picric Acid	88-89-1	Inhalation LC50 Acute Toxicity Estimate 0.5 mg/L 4 h (Source: ECHA)

11.2 Carcinogenicity:

International Agency for Research on Cancer (IARC)

Chemical Name	CAS Number	Classification
		No data found.

National Toxicology Program (NTP)

Chemical Name	CAS Number	Classification
		No data found.

U.S. OSHA specifically regulated carcinogens

Chemical Name	CAS Number	Classification
		No data found.

11.3 Additional Toxicology Information:

Harmful if swallowed or if inhaled. Toxic in contact with skin. Causes severe skin burns and eye damage. May cause an allergic skin reaction.

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SECTION 12: Ecological Information

12.1. Ecotoxicity

Chemical Name	CAS Number	Species	Exposure	Toxicity
	No data found.	None	None	

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)

Sizes: 10 g, 25 g, 125 g, 500 g

UN Number: UN1344

Proper Shipping Name: Trinitrophenol, wetted

Hazard Class: 4.1

Packing Group: I

Hazard Label(s):



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14.2 Transportation by Air - International Air Transport Association (IATA)

Sizes: 10 g, 25 g, 125 g, 500 g

UN Number: UN1344

Proper Shipping Name: Trinitrophenol, wetted

Hazard Class: 4.1

Packing Group: I

Hazard Label(s):



14.3 Transportation of Dangerous Goods (TDG, Canada)

Sizes: 10 g, 25 g, 125 g, 500 g

UN Number: UN1344

Proper Shipping Name: TRINITROPHENOL, WETTED

Hazard Class: 4.1

Packing Group: I

Hazard Label(s):



SECTION 15: Regulatory Information

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15.01. Occupational Safety and Health Administration (OSHA) Hazards

Chemical Name	CAS Number	Regulatory Information
No data found.		

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

Chemical Name	CAS Number	RQ
No data found.		

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

Chemical Name	CAS Number	Regulatory Information
No data found.		

15.04. Superfund Amendments and Reauthorization Act (SARA) 313 Toxics Release Inventory (TRI)

Chemical Name	CAS Number	List	Regulatory Information
Picric Acid	88-89-1	Emission Reporting	1.0 % de minimis concentration

15.05. Massachusetts Right-to-Know Substance List

Chemical Name	CAS Number	Regulatory Information
Picric Acid	88-89-1	Present

15.06. Pennsylvania Right-to-Know Hazardous Substances

Chemical Name	CAS Number	Regulatory Information
Picric Acid	88-89-1	Environmental hazard

15.07. New Jersey Worker and Community Right-to-Know Components

Chemical Name	CAS Number	Regulatory Information
Picric Acid	88-89-1	sn 1946

15.08. California Proposition 65

Chemical Name	CAS Number	Regulatory Information
No data found.		

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

Chemical Name	CAS Number	List	Status
Water	7732-18-5	DSL	Present
Picric Acid	88-89-1	DSL	Present

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

Chemical Name	CAS Number	Status
Water	7732-18-5	Present [XU] (ACTIVE)
Picric Acid	88-89-1	Present (ACTIVE)

15.11. European Inventory of Existing Commercial Chemical Substances (EINECS), European List of Notified Chemical Substances (ELINCS), and No Longer Polymers (NLP)

Chemical Name	CAS Number	List	Number
Water	7732-18-5	EINECS	231-791-2
Picric Acid	88-89-1	EINECS	201-865-9

15.12. China - Inventory of Existing chemical Substances (IECSC)

Chemical Name	CAS Number	Status
Water	7732-18-5	Present [32224]
Picric Acid	88-89-1	Present [21893]

15.13. Korea - Existing Chemicals Inventory (KECI/KECL)

Chemical Name	CAS Number	List	Status
Water	7732-18-5	Annex 1	Present [KE-35400]
Picric Acid	88-89-1	Annex 1	Present [KE-34715]

15.14. Japan - Existing and New Chemical Substances Inventory (ENCS)

Chemical Name	CAS Number	MITI No.
Water	7732-18-5	- (listed on Japanese Pharmacopoeia 8th Edition)
Picric Acid	88-89-1	(3)-823

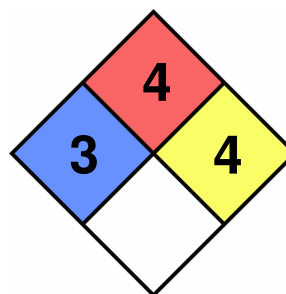
SECTION 16: Other Information

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16.1 National Fire Protection Associate (NFPA) Rating

Health: 3
Flammability: 4
Reactivity 4
Special Hazard:



16.2 Document Revision

Last Revision Date:
2026-05-24

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 RICCA CHEMICAL COMPANY assumes no legal responsibility or liability whatsoever resulting from its use.