



Nitric Acid

1. Identification

Product Name: Nitric Acid

Item #: RW0064, 8566

Web SDS: S385

Synonyms: N/A

Recommended Use: Laboratory Reagent

Restrictions on Use: Any use other than recommended

Manufacturer:

In Case of Emergency:

BBC Biochemical

Chemtec US 1-800-424-9300

409 Eleanor Lane,

Chemtec International 703-527-3887

Mount Vernon, WA 98273

1-800-635-4477

2. Hazards Identification

OSHA Hazard Classification(s):

Acute Toxicity - Inhalation - Category 1

Oxidizing Liquids - Category 3

Skin Corrosion - Category 1A

Eye Damage - Category 1

Signal Word: Danger

Hazard Statement(s): Fatal if inhaled. May intensify fire; oxidizer. Causes severe skin burns and eye damage. Causes serious eye damage.

Pictogram(s):



Precautionary Statement(s): Prevention: Do not breathe dust, vapors. Use only outdoors or in a well-ventilated area. In case of inadequate ventilation where IDLH, OSHA STEL or PEL values reached wear NIOSH approved respiratory protection. Keep away from heat. Keep/Store away from clothing and other combustible materials. Take any precaution to avoid mixing with combustibles and/or incompatible materials. Wear protective gloves, eye protection, face protection. Wear flame resistant clothing. Do not breathe dusts or mists. Wash body thoroughly after handling. Wear protective gloves, protective clothing, eye protection and face protection. Wear eye protection, face protection.

Response: If inhaled: Remove person to fresh air and keep comfortable for breathing. Immediately call a doctor. Specific treatment is urgent (see first aid section on this label) In case of fire: Use water, dry chemical, CO₂ or foam to extinguish. If swallowed: Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Take off all contaminated clothing and wash it before reuse. Specific treatment (see first aid section on this label). If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue Rinsing

Storage: Store in a well-ventilated place. Keep container tightly closed. Store locked up.

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

Chemical Name	Common Name	CAS #	Concentration %
Nitric Acid		7697-37-2	67%

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.



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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

Recommendations for immediate medical care/special treatment: Get medical advice/attention if you feel unwell.

5. Fire- Fighting Measures

Extinguishing Media: Dry chemical, carbon dioxide, alcohol foam, water.

Fire Hazards (Chemical): Oxidizing liquid increasing danger of fire.

Special Protective Equipment: Fire fighters should use self-contained breathing apparatus and protective clothing.

Precautions for Firefighters: Carbon monoxide, Nitrogen oxides (NO_x) and unidentified organic compounds may be formed during combustion.

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.

Containment and Clean-Up Procedures: Use barriers to prevent spreading. Collect spill in container. Call waste authorities.

7. Handling and Storage

Handling: Do not breathe vapors. Do not eat, drink or smoke when using this product.

Storage: Store in a well-ventilated place. Keep container tightly closed. Store locked up. Store only in plastic containers. Store separate from organic materials.

8. Exposure Controls/Personal Protection

OSHA Permissible Exposure Limits (PELs):

Reagent	CAS #	OSHA PEL TWA
Nitric Acid	7697-37-2	2ppm

ACGIH Threshold Limit Values (TLVs):

Reagent	CAS #	ACGIH PEL TLV	ACGIH STEL
Nitric Acid	7697-37-2	2ppm	4ppm

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: Colorless, Liquid

Molecular Weight: 63.02

Molecular Formula: HNO₃

pH: Less than 1

Boiling Point and Boiling Range: 120.5°C

Melting Point/Freezing Point: N/A

Flash Point: N/A

Specific Gravity/Relative Density: 1.413 g/cm³ at 20°C



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Odor: N/A
Odor Threshold: N/A
Color: Colorless
Flammability (solid/gas): N/A
Vapor Density: N/A
Upper/Lower flammability or explosive limits: N/A
Vapor Pressure: 37 mmHg at 50°C
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: Not Reactive
Chemical Stability: Stable
Conditions of Stability/Instability: Stable under normal conditions of temperature and pressure
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, metallic powders, hydrogen sulfide, carbides, alcohols [Note: Reacts with water to produce heat. Corrosive to metals.]
Hazardous Decomposition Products: Thermal-oxidation degradation can produce oxides of carbon. Toxic gases and vapors (i.e. Carbon monoxide) may be released in a fire.

11. Toxicological Information

Likely Routes of Exposure

Eyes: Irritation. Corrosive to eyes. May cause redness, burning and temporary or permanent damage to cornea.
Skin: Irritation. Corrosive to skin. May cause redness, burning and permanent scarring.
Inhalation: Dizziness, headache. Vapors are harmful to breathe.
Ingestion: Nausea. Solution is corrosive and may cause permanent damage to mouth, esophagus and stomach tissue. May cause gastrointestinal difficulties.

Signs or Symptoms of Exposure: Irritation eyes, skin, mucous membrane; delayed pulmonary edema, pneumonitis, bronchitis; dental erosion. Target Organs Eyes, skin, respiratory system, teeth

Effects from short term exposure (delayed, immediate, chronic): Irritation to the eyes, nose, throat; headache, dizziness, nausea.

Acute Toxicity (Numerical Measures): LC50(inhalation, rat)=260 mg/m³/30M, LC50 (inhalation, rat)=130 mg/m³/4H

Carcinogenicity (NTP, IARC, OSHA): Not listed as a known carcinogen.

12. Ecological Information

Ecotoxicity: N/A
Persistence and degradability: N/A
Bioaccumulation Potential (octanol-water partition coefficient, BCF): N/A
Mobility in the soil: N/A
Adverse Environmental Effects: N/A



Safety Data Sheet

Nitric Acid

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: UN2031

UN Proper Shipping Name: Nitric Acid

Transport Hazard Class(es): 8 (5.1)

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: N/A

DOT: N/A

EPA: N/A

CPSC: N/A



Safety Data Sheet

Nitric Acid

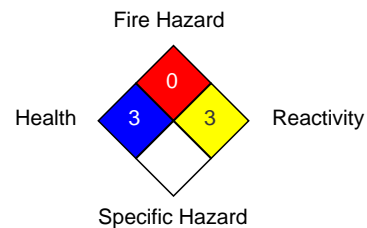
16. Other Information

Revision Date: 12/04/2015

NFPA

Health	3
Fire Hazard	0
Reactivity	3
Specific Hazard	

National Fire Protection Association (USA) NFPA



HMIS

Health	3
Flammability	0
Physical Hazard	3
Personal Protection	

Hazardous Material Information System HMIS

Health	3
Flammability	0
Physical Hazard	3
Personal Protection	

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