

Safety Data Sheet

Section 1. Substance Identity and Company Contact Information

Product Name	Nitric Acid	Product Part Number(s)	184705
Trade Name	Nitric Acid	Unit Size	
Company	OI Analytical, P.O. Box 9010, College Station, TX 77842-9010, Phone: (979) 690-1711, Fax: (979) 690-0440		

Emergency No. 1-800-424-9300 (Chemtrec). Use only in the event of chemical emergencies involving spills, leaks, fire, exposure, or accidents involving chemicals.

Section 2. Hazards Identification

Pictogram(s)



Signal Word

Danger

Precautionary Statement(s)

May intensify fire; oxidizer. May be corrosive to metals. Causes severe skin burns and eye damage.

Emergency Overview

Wear protective gloves/protective clothing/eye protection/face protection. Wash hands thoroughly after handling. Keep only in original container. Keep away from heat. Keep/Store away from clothing/combustible materials. Take any precaution to avoid mixing with combustibles. Use only outdoors or in a well-ventilated area.

Target Organ(s)

Skin

Potential Health Effects

Eye: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Skin: Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse

Ingestion: Rinse mouth. Do NOT induce vomiting.

Inhalation: Remove person to fresh air and keep comfortable for breathing. Absorb spillage to prevent material damage.

**Chronic Effects/
Carcinogenicity**

IARC: No data available
 NTP: No data available
 OSHA: No data available

**Teratology (Birth Defects)
Information**

Suspected of damaging fertility or the unborn child.

Reproductive Information

No data available

NFPA Ratings

Health: 3
 Flammability: 0
 Reactivity: 1
 Special Notice Key: No data available

HMIS Rating	Health:	No data available
	Flammability:	No data available
	Reactivity:	No data available
	Protective Equipment:	No data available

Section 3. Chemical Composition and Data on Components

Ingredient	CAS No.	Percent	Hazard Data	
			ACGIH TLV	OSHA PEL
Nitric acid	7697-37-2	65-70	No data available	No data available

Section 4. First Aid Measures

General Advice	Get medical advice/attention if you feel unwell. Show this safety data sheet to the doctor in attendance.
If Inhaled	Move to fresh air. Call a physician or poison control center immediately. If breathing stops, provide artificial respiration. If breathing is difficult, give oxygen.
In Case of Skin Contact	Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Call a physician or poison control center immediately. Wash contaminated clothing before reuse. Destroy or thoroughly clean contaminated shoes.
In Case of Eye Contact	Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Call a physician or poison control center immediately. In case of irritation from airborne exposure, move to fresh air. Get medical attention immediately.
If Swallowed	Call a physician or poison control center immediately. Do NOT induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.
Indication of Any Immediate Medical Attention and Special Treatment Needed	Treat symptomatically. Symptoms may be delayed.

Section 5. Fire-fighting Measures

General Information	Strong oxidizer - contact with other material may cause fire.
Suitable Extinguishing Media	Water spray, fog, CO ₂ , dry chemical, or regular foam.
Special Hazards Arising from the Substance or mixture	Oxidizing Contact with combustible material may cause fire. Fire may produce irritating, corrosive and/or toxic gases.
Advice for Firefighters	Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Flash Point	No data available
Autoignition Temperature	No data available
Further Information	Move containers from fire area if you can do so without risk. Use water spray to keep fire-exposed containers cool. Cool containers exposed to flames with water until well after the fire is out.

Section 6. Accidental Release Measures

Personal Precautions, Protective Equipment, and Emergency Procedures	Keep unauthorized personnel away. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Use personal protective equipment. See Section 8 of the MSDS for Personal Protective Equipment. Ventilate closed spaces before entering them. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
Environmental Precautions	Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.
Methods and Materials for Containment and Cleaning	Keep combustibles (wood, paper, oil, etc.) away from spilled material. Stop leak if possible without any risk. Do not absorb in sawdust or other combustible materials. Absorb spill with vermiculite or other inert material. Collect in a non-combustible container for prompt disposal. Clean surface thoroughly to remove residual contamination. Dike far ahead of larger spill for later recovery and disposal.
Reference to Other Sections	For disposal, see Section 13.

Section 7. Handling and Storage

Precautions for Safe Handling	Keep away from combustible material. Do not get in eyes, on skin, on clothing. Wash hands thoroughly after handling. Do not eat, drink or smoke when using the product. Do not taste or swallow. Never add water to acid! Never pour water into acid/base. Dilute by slowly pouring the product into water while stirring.
Conditions for Safe Storage, Including any Incompatibilities	Do not store in metal containers. Store away from heat and light. Keep away from combustible material. Keep containers closed when not in use. Store in a cool, dry place. Keep container in a well-ventilated place.
Specific End Use(s)	Analytical chemistry

Section 8. Exposure Controls and Personal Protection

Components with Workplace Control Parameters	No data available
Appropriate Engineering Controls	Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. An eye wash and safety shower must be available in the immediate work area.
Eye/Face Protection	Wear safety glasses with side shields (or goggles) and a face shield.
Skin Protection	Chemical resistant gloves
Body Protection	Wear suitable protective clothing.
Respiratory Protection	In case of inadequate ventilation use suitable respirator. Chemical respirator with acid gas cartridge.
Control of Environmental Exposure	No data available

Section 9. Physical and Chemical Properties

Appearance	Form: Liquid, colorless to slightly yellow
Odor	Pungent
Odor Threshold	No data available
pH	1
Melting Point/Freezing Point	-42 °C
Initial Boiling Point and Boiling Range	122 °C
Flash Point	No data available
Evaporation Rate	No data available
Flammability (solid, gas)	No data available
Upper/Lower Flammability or Explosive Limits	No data available
Vapor Pressure	6.4 kPa
Vapor Density	2.5
Relative Density	1.41
Water Solubility	Soluble
Partition Coefficient : n-octanol/water	No data available
Auto-ignition Temperature	No data available
Decomposition Temperature	No data available
Viscosity	No data available
Explosive Properties	No data available
Oxidizing Properties	No data available
Other Safety Information	No data available

Section 10. Stability and Reactivity

Reactivity	Reacts violently with strong alkaline substances.
Chemical Stability	Material is stable under normal conditions.
Possibility of Hazardous Reactions	Hazardous polymerization does not occur. Decomposes on heating
Conditions to Avoid	Reacts violently with strong alkaline substances. Avoid contact with strong reducing agents. Excessive heat. Contact with incompatible materials.
Incompatible Materials	Alcohols. Reducing agents. Metals. Alkalies.

Section 11. Toxicological Information

Routes of Exposure	<i>On the skin:</i>	Causes severe skin burns.
	<i>On the eye:</i>	Causes serious eye damage.
	<i>Inhalation:</i>	May cause damage to mucous membranes in nose, throat, lungs and bronchial system.
	<i>Ingestion:</i>	May cause burns of the gastrointestinal tract if swallowed.
Respiratory or Skin Sensitization	No data available	
Signs and Symptoms of Overexposure	No data available	
Toxicity Data	<i>Oral Rat</i>	LC 50 (Rat, 4 h): 65 mg/l

Section 12. Ecological Information

General Notes	No data available
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Section 13. Disposal Considerations

Product	Discharge, treatment, or disposal may be subject to national, state, or local laws.
Contaminated Packaging	Since emptied containers retain product residue, follow label warnings even after container is emptied.

Section 14. Transport Information

DOT Shipping Name	Nitric Acid
UN Proper Shipping Name	Nitric Acid
DOT Hazard Class	8, 5.1
Packing Group	II
UN Number	UN 2031
Hazardous Ingredients	Not classified
DOT Label	Not classified
DOT Placard	Not classified

IMDG Shipping Name	Nitric Acid
UN Number	UN 2031
Class	8, 5.1
Packing Group	II

IATA Shipping Name	Nitric Acid
Technical Shipping Name	Nitric Acid
IATA Hazard Class	8, 5.1
UN Number	UN 2031
Hazardous Ingredients	Not classified
IATA Label	Not classified
IATA Placard	Not classified

Section 15. Regulatory Information

OSHA Status	Not listed
TSCA Status	Not listed
CERCLA Reportable Quantity	Reportable quantity: 1000 lbs.
SARA Title III	Not listed
RCRA Status	Not listed
California Proposition 65	Not listed
Chemical Weapons Convention	Not listed
TSCA 12 (b)	Not listed
SARA 311/312	Acute: Yes
	Chronic: Yes
	Fire: Yes
	Pressure: No data available
	Reactivity: No data available
Australian Hazchem Code	Not listed
Poison Schedule	No data available
WHMIS	No data available

Section 16. Other Information

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