



COLUMBUS CHEMICAL INDUSTRIES INC.

P.O. BOX 8
 COLUMBUS, WISCONSIN 53925-0008
 (920) 623-2140
 FAX (920) 623-2577

Material Safety Data Sheet

May be used to comply with OSHA's Hazard Communication Standard, 29 CFR 1910 1200. Standard must be consulted for specific requirements

U.S. Department of Labor

Occupational Safety and Health Administration
 (Non-Mandatory Form)
 Form Approved
 OMB No. 1218-0072

IDENTITY (as Used on Label and List)

Nitric Acid, 50-70%

Note: Blank spaces are not permitted. If any item is not applicable or no information is available, the space must be marked to indicate that.

Section I

Manufacturers /Distributor Address Number Street City State and Zip Code

Columbus Chemical Industries

P.O. Box 8, N4335 Temkin Rd.

Columbus, WI 53925-0008

Emergency Telephone Number

CHEMTREC 1-800-424-9300

Telephone Number for Information

1 (920) 623-2140

Date Prepared

11-01-04

Signature of Preparer (optional)

Section II - Hazardous Ingredients/Identity Information

Hazardous Components (Specific Chemical Identity, Common Name(s))	CAS #	OSHA PEL	ACGIH TLV	Other Limits Recommended	% (optional)
Nitric Acid*	7697-37-2	5 mg/m ³	5 mg/m ³	STEL:10mg/m ³	50-70%

*EPA TSCA Section 8(B) Chemical Inventory

*Subject to SARA Section 313 Reporting Requirements.

*Toxicity Data: Acute Oral LD₅₀: 430 mg/kg human (Nitric Acid, Concentrate)

Section III - Physical/Chemical Characteristics

Boiling Point	122°C (252°F)	Specific Gravity (H ₂ O = 1)	1.4200
Vapor Pressure (mm Hg) @20 °C (68 °F)	48 mmHg	Melting Point	-42°C (-44°F)
Vapor Density (AIR = 1)	2.5	Evaporation Rate (Butyl Acetate = 1)	Not Available

Solubility in Water

Complete pH = <1.0 Volatiles:100%

Appearance and Odor

Clear, colorless to yellow liquid

Section IV Fire and Explosion Hazard Data

Flash Point (Method Used)	Flammable Limits	LEL	UEL
Nonflammable		Not Applicable	Not Applicable

Extinguishing Media

Use water spray on nitric acid induced fire.

Special Fire Fighting Procedures

In the event of a fire, wear full protective clothing and NIOSH/MSHA-approved self-contained breathing apparatus with full facepiece operated in pressure demand or other positive pressure mode. Prevent contact with skin and eyes.

Unusual Fire and Explosion Hazards

Oxidizer! Can ignite combustible and organic materials. Reacts explosively with metal powders.

Section V Reactivity Data

Stability	Unstable		Conditions to Avoid	Light and heat
	Stable	X		

Incompatibility Materials to Avoid

Metals, wood, paper, organics, alkalis, fluorine, reducing agents, combustible and flammable materials, metals

Hazardous Decomposition or Byproducts

Nitrogen oxides, hydrogen nitrate. Reacts with water or steam to produce heat, toxic and corrosive fumes.

Hazardous Polymerization**Conditions to Avoid**

	May Occur		N/A
	Will Not Occur	X	

Section VI Health Hazard Data

Routes of Entry	Inhalation ?	Skin ?	Ingestion ?
Multiple	Yes	Yes	Yes

Health Hazards (Acute and Chronic)

SKIN: causes severe ulcerating burns. Eyes: Causes severe burns and permanent damage. Vapors are very irritating.

Inhalation: causes irritation, breathing difficulty. Ingestion: Causes severe burns to all mucous membranes.

Carcinogenicity	NTP	IARC Monographs	OSHA REGULATED?
	Not Listed	Not Listed	Not Listed

Signs and Symptoms of Exposure.

Burns to skin, eyes and/or upper respiratory tract. Coughing, wheezing, laryngitis, shortness of breath, headache, nausea and vomiting. Skin inflammation, burns and/or edema. Causes permanent eye damage. May be fatal if swallowed.

Medical Conditions Generally Aggravated by Exposure

None identified.

Emergency and First Aid Procedures **INGESTION:** If swallowed, wash out mouth with water, call a physician. Do not leave victim unattended. **EYES:** In case of contact, immediately flush with large amounts of water for at least 30 minutes. Call physician. **INHALATION:** If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call physician. **SKIN:** Immediately wash skin with soap and large amounts of water.

Section VII Precautions for Safe Handling and Use

Steps to be Taken in Case Material is Released or Spilled Remove all combustible materials. Wear self-contained breathing apparatus and full protective clothing. Dike spill and dilute with water. Contain spill with dikes, sand or noncombustible absorbent material. Do not seal container. Neutralize residue with soda ash, lime or limestone.

Waste Disposal Method Dispose of spillage, empty containers and other materials used for cleanup in compliance with all federal, state, and local regulations.

Precautions to be Taken in Handling and Storing

Store in a cool, dry, well-ventilated place. Avoid storage on wood. Prevent physical damage. Store separate from organics, alkalis and combustibles. Avoid direct sunlight.

Other Precautions Do not get in eyes, on skin or on clothing. Do not take internally. Avoid breathing mist or vapors. Nitric acid is an oxidizing agent.

Section VII Control Measures

Respiratory Protection (Specify Type) NIOSH / MSHA approved respirator

Ventilation	Local Exhaust	Required.	Special	Safety shower nearby.
	Mechanical (General)	Acceptable.	Other	Eye-wash station nearby.

Protective Gloves Chemical resistant gloves. **Eye Protection** Chemical goggles and faceshield.

Other Protective Clothing or Equipment Coveralls, impervious boots. Eye wash and shower facilities nearby.

Work /Hygienic Practices Wash exposed area thoroughly after handling. Avoid breathing. Avoid contact with eyes, skin and clothing. Do not wear contact lenses when handling this material.