

# **Safety Data Sheet**

# Nitric Acid 40% Pacifying Grade

## **1. PRODUCT AND COMPANY IDENTIFICATION**

Product Name: Nitric Acid 40% Pacifying Grade

Synonyms/Generic Names: None

Product Number: 9125

Product Use: Industrial, Manufacturing or Laboratory use

Manufacturer: Columbus Chemical Industries, Inc. N4335 Temkin Rd. Columbus, WI. 53925

For More Information: 920-623-2140 (Monday-Friday 8:00-4:30) www.columbuschemical.com

In Case of Emergency Call: CHEMTREC - 800-424-9300 or 703-527-3887 (24 Hours/Day, 7 Days/Week)

## 2. HAZARDS IDENTIFICATION

### Hazard Not Otherwise Classified (HNOC): None

Signal Words: Danger

**Pictograms:** 



### **GHS Classification:**

Oxidizing liquid	Category 3
Skin corrosion	Category 1A
Serious eye damage	Category 1

#### GHS Label Elements, including precautionary statements:

#### **Hazard Statements:**

H272	May intensify fire; oxidizer.
H314	Causes severe skin burns and eye damage.

#### **Precautionary Statements:**

P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P220	Keep/Store away from clothing and other combustible materials.
P221	Take any precaution to avoid mixing with combustibles.
P260	Do not breathe fume/gas/mist/vapors/spray.
P264	Wash hands thoroughly after handling.

P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do not induce vomiting.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse
	skin with water/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/doctor/physician.
P363	Wash contaminated clothing before reuse.
P370+P378	In case of fire: Use appropriate media to extinguish.
P405	Store locked up.
P501	Dispose of contents/container in accordance with local regulations.

## **Potential Health Effects**

Inhalation May be harmful if inhaled. Causes respiratory tract irritation.	
Skin May be harmful if absorbed through skin. Causes skin irritation.	
Ingestion May be harmful if swallowed.	

#### **NFPA Ratings**

Health	3
Flammability	0
Reactivity	1
Specific hazard	Not Available

## HMIS Ratings

Health	3
Fire	0
Reactivity	1

# **3. COMPOSITION/INFORMATION ON INGREDIENTS**

Component	Weight %	CAS #	EINECS# / ELINCS#	Formula	Molecular Weight
Nitric Acid	39-41	7697-37-2	231-714-2	HNO <sub>3</sub>	63.01 g/mol
Water	Balance	7732-18-5	231-791-2	H <sub>2</sub> O	18.00 g/mol

# **4. FIRST-AID MEASURES**

Eyes	Rinse with plenty of water for at least 15 minutes and seek medical attention immediately.
Inhalation	Move casualty to fresh air and keep at rest. If breathing is difficult, give oxygen. If not
	breathing, give artificial respiration. Get medical attention immediately.
Skin	Immediately flush with plenty of water for at least 15 minutes while removing contaminated
	clothing and wash using soap. Get medical attention immediately.
Ingestion	Do Not Induce Vomiting! Never give anything by mouth to an unconscious person. If
-	conscious, wash out mouth with water. Get medical attention immediately.

# 5. FIRE-FIGHTING MEASURES

Suitable (and unsuitable) extinguishing media	Use dry chemical, carbon dioxide or alcohol-resistant foam to extinguish fire. Use appropriate media for adjacent fire. Cool unopened containers with water.
Special protective equipment and precautions for firefighters	Wear self-contained, approved breathing apparatus and full protective clothing, including eye protection and boots.

Specific hazards arising from	Emits toxic fumes (nitrogen oxides) under fire conditions. (See also
the chemical	Stability and Reactivity section).

## 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	See section 8 for recommendations on the use of personal protective equipment.
Environmental precautions	Prevent spillage from entering drains. Any release to the environment may be subject to federal/national or local reporting requirements.
Methods and materials for containment and cleaning up	Neutralize spill with sodium bicarbonate or lime. Absorb spill with noncombustible absorbent material, then place in a suitable container for disposal. Clean surfaces thoroughly with water to remove residual contamination. Dispose of all waste and cleanup materials in accordance with regulations.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

See section 8 for recommendations on the use of personal protective equipment. Use with adequate ventilation. Wash thoroughly after using. Keep container closed when not in use. Avoid formation of aerosols.

#### Conditions for safe storage, including any incompatibilities

Store in a cool, dry, well ventilated area. Keep away from incompatible materials (see section 10 for incompatibilities).

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

#### Occupational exposure controls:

Component	Exposure Limits	Basis	Entity	
Nitric Acid	2 ppm 5.2 mg/m <sup>3</sup>	TLV	ACGIH	
	4 ppm 10 mg/m <sup>3</sup>	STEL	ACGIH	
	2 ppm 5 mg/m <sup>3</sup>	PEL	OSHA	
	2 ppm 5 mg/m <sup>3</sup>	REL	NIOSH	
	4 ppm 10 mg/m <sup>3</sup>	STEL	NIOSH	
	25 ppm	IDLH	NIOSH	

TWA: Time Weighted Average over 8 hours of work.

TLV: Threshold Limit Value over 8 hours of work.

REL: Recommended Exposure Limit

PEL: Permissible Exposure Limit

STEL: Short Term Exposure Limit during x minutes.

IDLH: Immediately Dangerous to Life or Health

WEEL: Workplace Environmental Exposure Levels

CEIL: Ceiling

#### **Personal Protection**

⊏yes
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Wear chemical safety glasses or goggles, and face shield.

Inhalation	Provide local exhaust, preferably mechanical. If exposure levels are excessive, use an
	approved respirator.
Skin	Wear nitrile or rubber gloves, and full body covering. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
Other	Not Available

## **Other Recommendations**

Provide eyewash stations, quick-drench showers and washing facilities accessible to areas of use and handling.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance (physical state, color, etc.)	Clear, colorless liquid.
Odor	Not Available
Odor threshold	Not Available
рН	Not Available
Melting point/freezing point	Not Available
Initial boiling point and boiling range	Not Available
Flash point	Not Flammable
Evaporation rate	Not Available
Flammability (solid, gas)	Not Flammable
Upper/lower flammability or explosive limit	Not Explosive
Vapor pressure	Not Available
Vapor density	Not Available
Specific gravity	1.2444
Solubility (ies)	Soluble in water.
Partition coefficient: n-octanol/water	Not Available
Auto-ignition temperature	Not Available
Decomposition temperature	Not Available

# **10. STABILITY AND REACTIVITY**

Chemical Stability	Stable
Possibility of Hazardous Reactions	Will not occur.
Conditions to Avoid	May discolor on exposure to air and light.
Incompatible Materials	Alkali metals, organic materials, acetic anhydride, acetonitrile,
	alcohols, acrylonitrile.
Hazardous Decomposition Products	Nitrogen oxides.

# **11. TOXICOLOGICAL INFORMATION**

## **Acute Toxicity**

Nitric Acid	
Skin	Not Available
Eyes	Not Available
Respiratory	Not Available
Ingestion	LDLO Oral – Human – 430 mg/kg

### Carcinogenicity

IARC	No components of this product present at levels greater than or equal to 0.1% is
	identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH	No components of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
NTP	No components of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA	No components of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

### Signs & Symptoms of Exposure

Skin	Itching, swelling, redness, burning.	
Eyes	Itching, redness, burning, watering eyes.	
Respiratory	Burning, choking, shortness of breath, coughing, wheezing, dizziness.	
Ingestion	Burning, choking, nausea, vomiting, pain.	

Chronic Toxicity	Not Available
Teratogenicity	Tetotoxicity (except death)
Mutagenicity	Not Available
Embryotoxicity	Tetotoxicity (except death)
Target Organ(s)	Lungs, Teeth, Cardiovascular system
Reproductive Toxicity	Not Available
<b>Respiratory/Skin Sensitization</b>	Not Available

## **12. ECOLOGICAL INFORMATION**

## Ecotoxicity

Aquatic Vertebrate	LC50 – Gambusia affinis – 72 mg/L – 96h	
Aquatic Invertebrate	Not Available	
Terrestrial	Not Available	
Persistence and Degradability Not Available		
Bioaccumulative Potential		Not Available
Mobility in Soil		Not Available
PBT and vPvB Assessment		Not Available
Other Adverse Effects		Not Available

## **13. DISPOSAL CONSIDERATIONS**

Waste Product or Residues	Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies if necessary before disposing of waste product or residue.
Product	Users should review their operations in terms of the applicable federal/national or
Containers	local regulations and consult with appropriate regulatory agencies if necessary
	before disposing of waste product container.

The information offered in section 13 is for the product as shipped. Use and/or alterations to the product may significantly change the characteristics of the material and alter the waste classification and proper disposal methods.

## **14. TRANSPORTATION INFORMATION**

US DOT	UN2031, Nitric acid, 8, pg II
TDG	UN2031, NITRIC ACID, 8, PG II
IMDG	UN2031, NITRIC ACID, 8, PG II

Marine Pollutant	No
IATA/ICAO	UN2031, Nitric acid, 8, pg II

## **15. REGULATORY INFORMATION**

TSCA Inventory Status	All ingredients are listed on the TSCA Active inventory.
DSL / NDSL	All ingredients are listed on the DSL inventory.
California Proposition 65	Not Listed
Rhode Island: Hazardous Substance List	Listed: Nitric Acid
Massachusetts: Toxic or Hazardous Substance List,	Listed: Nitric Acid
Right to Know	
Pennsylvania: Hazardous Substance List	Listed: Nitric Acid
New Jersey: Right to Know Hazardous Substance	Listed: Nitric Acid
List	
SARA 302	Listed: Nitric Acid
SARA 304	Listed: Nitric Acid
SARA 311	Fire Hazard, Acute Health Hazard.
SARA 312	Fire Hazard, Acute Health Hazard.
SARA 313	Listed: Nitric Acid
WHMIS Canada	Class C: Oxidizing material.
	Class E: Corrosive material.

## **16. OTHER INFORMATION**

Revision	Date
Original	12/04/2012
Revision 1	08/08/2013
Revision 2	03/16/2015
Revision 3	10/31/2017
Revision 4	01/10/2022

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