

# Safety Data Sheet

## Nitric Acid, 10% (w/w)

### 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** Nitric Acid, 10% (w/w)

**Synonyms/Generic Names:** None

**Product Number:** 9106

**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](http://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

**Signal Words:** Danger

**Pictograms:**



**GHS Classification:**

Skin corrosion	Category 1A
Serious eye damage	Category 1

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

**Hazard Statements:**

H314	Causes severe skin burns and eye damage.
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**Precautionary Statements:**

P280	Wear protective gloves/protective clothing/eye protection/face protection.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing.
P310	Immediately call a POISON CENTER or doctor/physician.

**Potential Health Effects**

<b>Eyes</b>	Causes eye irritation.
<b>Inhalation</b>	May be harmful if inhaled. Causes respiratory tract irritation.

<b>Skin</b>	May be harmful if absorbed through skin. Causes skin irritation.
<b>Ingestion</b>	May be harmful if swallowed.

**NFPA Ratings**

<b>Health</b>	3
<b>Flammability</b>	0
<b>Reactivity</b>	1
<b>Specific hazard</b>	N/A

**HMIS Ratings**

<b>Health</b>	3
<b>Fire</b>	0
<b>Reactivity</b>	1

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Component	Weight %	CAS #	EINECS# / ELINCS#	Formula	Molecular Weight
Nitric Acid	10	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**

<b>Eyes</b>	In case of eye contact, rinse with plenty of water and seek medical attention immediately.
<b>Inhalation</b>	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.
<b>Skin</b>	Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and wash using soap. Get medical attention immediately.
<b>Ingestion</b>	<b>Do Not Induce Vomiting!</b> Never give anything by mouth to an unconscious person. If conscious, wash out mouth with water. Get medical attention immediately.

**5. FIRE-FIGHTING MEASURES**

<b>Suitable (and unsuitable) extinguishing media</b>	Product is not flammable. Use appropriate media for adjacent fire. Cool containers with water.
<b>Special protective equipment and precautions for firefighters</b>	Wear self-contained, approved breathing apparatus and full protective clothing, including eye protection and boots.
<b>Specific hazards arising from the chemical</b>	Emits toxic fumes (nitrogen oxides) under fire conditions. (See also Stability and Reactivity section).

**6. ACCIDENTAL RELEASE MEASURES**

<b>Personal precautions, protective equipment and emergency procedures</b>	See section 8 for recommendations on the use of personal protective equipment.
<b>Environmental precautions</b>	Prevent spillage from entering drains. Any release to the environment may be subject to federal/national or local reporting requirements.
<b>Methods and materials for containment and cleaning up</b>	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 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

<b>Eyes</b>	Wear chemical safety glasses or goggles and face shield.
<b>Inhalation</b>	Provide local exhaust, preferably mechanical. If exposure levels are excessive, use an approved respirator.
<b>Skin</b>	Wear nitrile or rubber gloves and a full body suit.
<b>Other</b>	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.)	Colorless liquid.
Odor	Not Available
Odor threshold	Not Available

pH	Not Available
Melting point/freezing point	Not Available
Initial boiling point and boiling range	100°C (212°F)
Flash point	Not Flammable
Evaporation rate	Not Available
Flammability (solid, gas)	Not Flammable
Upper/lower flammability or explosive limit	Not Explosive
Vapor pressure	123 hPa (17 mmHg) at 20°C (68°F)
Vapor density	Not Available
Density	1.15g/cm <sup>3</sup> at 20°C (68°F)
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

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

## 11. TOXICOLOGICAL INFORMATION

### Acute Toxicity

<b>Skin</b>	Not Available
<b>Eyes</b>	Not Available
<b>Respiratory</b>	Not Available
<b>Ingestion</b>	LDLO Oral – Human – 430 mg/kg

### Carcinogenicity

<b>IARC</b>	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.
<b>ACGIH</b>	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.
<b>NTP</b>	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.
<b>OSHA</b>	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

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

<b>Chronic Toxicity</b>	Not Available
<b>Teratogenicity</b>	Tetotoxicity (except death)
<b>Mutagenicity</b>	Not Available

<b>Embryotoxicity</b>	Tetotoxicity (except death)
<b>Specific Target Organ Toxicity</b>	Lungs, Teeth, Cardiovascular system

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

<b>Aquatic Vertebrate</b>	LC50 – Gambusia affinis – 72 mg/L – 96h
<b>Aquatic Invertebrate</b>	Not Available
<b>Terrestrial</b>	Not Available

<b>Persistence and Degradability</b>	Not Available
<b>Bioaccumulative Potential</b>	Not Available
<b>Mobility in Soil</b>	Not Available
<b>PBT and vPvB Assessment</b>	Not Available
<b>Other Adverse Effects</b>	Not Available

## 13. DISPOSAL CONSIDERATIONS

<b>Waste Residues</b>	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 container.
<b>Product Containers</b>	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 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, Right to Know	Listed: Nitric Acid
Pennsylvania: Hazardous Substance List	Listed: Nitric Acid

New Jersey: Right to Know Hazardous Substance List	Listed: Nitric Acid
SARA 302	Listed: Nitric Acid
SARA 304	Listed: Nitric Acid
SARA 311	Acute Health Hazard
SARA 312	Acute Health Hazard
SARA 313	Listed: Nitric Acid
WHMIS Canada	Class C: Oxidizing material Class E: Corrosive material

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## 16. OTHER INFORMATION

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Revision	Date
Original	12/04/2012
Revision 1	08/09/2021

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