

# Safety Data Sheet

## Nitric Acid Trace Grade

### 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** Nitric Acid Trace Grade

**Synonyms/Generic Names:** None

**Product Number:** 3619

**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

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

**Signal Words:** Danger

**Pictograms:**



**GHS Classification:**

|                    |             |
|--------------------|-------------|
| Oxidizing liquids  | 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 dust/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 water spray, dry chemical or carbon dioxide to extinguish.  |
| P405           | Store locked up.   |
| P501           | Dispose of contents/container in accordance with local regulations.  |

### Potential Health Effects

|                   |   |
|-------------------|---|
| <b>Eyes</b>       | Causes severe eye burns.  |
| <b>Inhalation</b> | May be harmful if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract. |
| <b>Skin</b>       | May be harmful if absorbed through skin. Causes skin burns.   |
| <b>Ingestion</b>  | May be harmful if swallowed.  |

### NFPA Ratings

|                        |    |
|------------------------|----|
| <b>Health</b>          | 3  |
| <b>Flammability</b>    | 0  |
| <b>Reactivity</b>      | 2  |
| <b>Specific hazard</b> | OX |

### HMIS Ratings

|                   |   |
|-------------------|---|
| <b>Health</b>     | 3 |
| <b>Fire</b>       | 0 |
| <b>Reactivity</b> | 2 |

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

| Component   | Weight % | CAS #     | EINECS# / ELINCS# | Formula          | Molecular Weight |
|-------------|----------|-----------|-------------------|------------------|------------------|
| Nitric Acid | 67-70    | 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>       | Rinse with plenty of water for at least 15 minutes 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. |

**Specific hazards arising from the chemical**

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 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<br>5.2 mg/m <sup>3</sup> | TLV   | ACGIH  |
|             | 4 ppm<br>10 mg/m <sup>3</sup>  | STEL  | ACGIH  |
|             | 2 ppm<br>5 mg/m <sup>3</sup>   | PEL   | OSHA   |
|             | 2 ppm<br>5 mg/m <sup>3</sup>   | REL   | NIOSH  |
|             | 4 ppm<br>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****Eyes**

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 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. |
| <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  | <1 at 20°C (68°F)              |
| Melting point/freezing point                | Not Available                  |
| Initial boiling point and boiling range     | 120.5°C (248.9°F)              |
| Flash point                                 | Not Flammable                  |
| Evaporation rate                            | Not Available                  |
| Flammability (solid, gas)                   | Not Flammable                  |
| Upper/lower flammability or explosive limit | Not Explosive                  |
| Vapor pressure                              | 11 hPa (8 mmHg) at 20°C (68°F) |
| Vapor density                               | 2.3 (air=1)                    |
| Specific gravity                            | 1.42                           |
| 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, severe 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>Target Organ(s)</b>                | Lungs, Teeth, Cardiovascular system |
| <b>Reproductive Toxicity</b>          | Not Available                       |
| <b>Respiratory/Skin Sensitization</b> | Not Available                       |

## 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 Product or 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 or residue. |
| <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, (5.1), pg II |
| TDG              | UN2031, NITRIC ACID, 8, (5.1), PG II |
| IMDG             | UN2031, NITRIC ACID, 8, (5.1), PG II |
| Marine Pollutant | No                                   |
| IATA/ICAO        | UN2031, Nitric acid, 8, (5.1), 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  | Fire Hazard, Acute Health Hazard.                            |
| SARA 312  | Fire Hazard, Acute Health Hazard.                            |
| SARA 313  | Listed: Nitric Acid  |
| WHMIS Canada  | Class C: Oxidizing material.<br>Class E: Corrosive material. |

## 16. OTHER INFORMATION

| Revision   | Date       |
|------------|------------|
| Original   | 10/04/2018 |
| Revision 1 | 01/10/2022 |
|            |            |
|            |            |

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