

### 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** Nitric Acid 70% ACS Grade - Low Particle

**Synonyms:** Nitric Acid - Low Particle

**CAS Number:** 7697-37-2

**Grade/Purity:** ACS Grade

**Product Type:** Acids

**Product Use:** Industrial, Manufacturing or Laboratory use

**Manufacturer/Supplier:** Alliance Chemical, 204 South Edmond St, Taylor, Texas 76574

**Information:** 512-365-6838 | [www.alliancechemical.com](http://www.alliancechemical.com)

**Emergency:** CHEMTEL - 800-255-3924 (24 Hours/Day, 7 Days/Week)

### 2. HAZARDS IDENTIFICATION

**Signal Word:** Danger

**GHS Pictograms:**



**Hazard Statements:**

|        |                                         |
|--------|-----------------------------------------|
| EUH071 | Corrosive to the respiratory tract      |
| H272   | May intensify fire; oxidiser            |
| H290   | May be corrosive to metals              |
| H314   | Causes severe skin burns and eye damage |
| H331   | Toxic if inhaled                        |

**Precautionary Statements:**

|                |                                                                                                                                  |
|----------------|----------------------------------------------------------------------------------------------------------------------------------|
| P210           | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.                                   |
| P220           | Keep away from clothing and other combustible materials.                                                                         |
| P234           | Keep only in original packaging.                                                                                                 |
| P260           | Do not breathe dust, fume, gas, mist, vapours or spray.                                                                          |
| P264           | Wash hands and face thoroughly after handling.                                                                                   |
| P271           | Use only outdoors or in a well-ventilated area.                                                                                  |
| P280           | Wear protective gloves, protective clothing, and eye/face protection.                                                            |
| P284           | Wear respiratory 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 or 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 or doctor.                                                                                      |
| P311           | Call a POISON CENTER or doctor.                                                                                                  |
| P320           | Specific treatment is urgent (see first-aid information on this label).                                                          |

|           |                                                                                                                |
|-----------|----------------------------------------------------------------------------------------------------------------|
| P321      | Specific treatment (see first-aid information on this label).                                                  |
| P363      | Wash contaminated clothing before reuse.                                                                       |
| P370+P378 | In case of fire: Use appropriate media to extinguish.                                                          |
| P403+P233 | Store in a well-ventilated place. Keep container tightly closed.                                               |
| P405      | Store locked up.                                                                                               |
| P501      | Dispose of contents and container in accordance with local, regional, national, and international regulations. |

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

| COMPONENT                  | % MIN | % MAX | CAS #     | EINECS# / ELINCS# | FORMULA          | MOLECULAR WEIGHT |
|----------------------------|-------|-------|-----------|-------------------|------------------|------------------|
| Nitric Acid - Low Particle | 70    | 70    | 7697-37-2 | 231-714-2         | HNO <sub>3</sub> | 63.013 g/mol     |
| Water                      | 30    | 30    | 7732-18-5 | 231-791-2         | H <sub>2</sub> O | 18.02 g/mol      |

### 4. FIRST-AID MEASURES

|            |                                                                                                                                                                                        |
|------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Eyes       | Rinse with plenty of water for at least 15 minutes. Remove contact lenses if present and easy to do. Continue rinsing. Seek medical attention immediately.                             |
| Skin       | Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing. Wash with soap. Get medical attention immediately.                                |
| Inhalation | Move person to fresh air and keep comfortable for breathing. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. 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 Media       | Dry chemical, CO <sub>2</sub> , water spray. Use water spray to cool containers. |
| Unsuitable Media     | Do not use a solid water stream as it may scatter and spread fire.               |
| Protective Equipment | Wear self-contained breathing apparatus and full protective clothing.            |
| Combustion Products  | May include carbon oxides and other toxic fumes. See Section 10.                 |

### 6. ACCIDENTAL RELEASE MEASURES

|                       |                                                                                                         |
|-----------------------|---------------------------------------------------------------------------------------------------------|
| Personal Precautions  | Use PPE as described in Section 8. Ensure adequate ventilation. Evacuate personnel to safe areas.       |
| Environmental         | Prevent leakage or spillage from entering drains, sewers, or waterways.                                 |
| Containment & Cleanup | Absorb with inert material. Collect in appropriate waste container. Dispose per applicable regulations. |

### 7. HANDLING AND STORAGE

|               |                                                                                                                                                                         |
|---------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Safe Handling | Use with adequate ventilation. Avoid contact with skin, eyes, and clothing. Wash thoroughly after handling. Keep container closed when not in use.                      |
| Safe Storage  | Store in a cool, dry, well-ventilated area. Use corrosion-resistant containers. Keep away from incompatible materials (see Section 10). Keep containers tightly closed. |

### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Engineering Controls:** Use adequate ventilation. Provide eyewash stations and quick-drench showers accessible to areas of use.

**Occupational Exposure Limits:**

| AGENCY    | EXPOSURE LIMIT         |
|-----------|------------------------|
| OSHA PEL  | 2 ppm TWA              |
| NIOSH REL | 2 ppm TWA / 4 ppm STEL |

|      |        |
|------|--------|
| IDLH | 25 ppm |
|------|--------|

|            |                                                                                                                                                                                                                                                                                           |
|------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Eyes       | Wear chemical safety goggles or face shield.                                                                                                                                                                                                                                              |
| Skin       | Wear chemical-resistant gloves and protective clothing.                                                                                                                                                                                                                                   |
| Inhalation | For mist or aerosol applications (e.g., spray, atomization, pressure washing), use a NIOSH-approved half-face air-purifying respirator with combination acid gas / P100 cartridges. For dust exposure, an N95 or P100 particulate filter is acceptable. Ensure local exhaust ventilation. |

Exposure limits sourced from NIOSH Pocket Guide and OSHA 29 CFR 1910.1000. Hazard classification from ECHA Classification and Labelling Inventory (CLP Annex VI).

## 9. PHYSICAL AND CHEMICAL PROPERTIES

|                            |                                        |
|----------------------------|----------------------------------------|
| Appearance                 | Colorless to pale yellow liquid        |
| Odor                       | Characteristic                         |
| Median Particle Size       | Not Applicable                         |
| Particle Size Distribution | Not Applicable                         |
| Particle Shape             | Not Applicable                         |
| Surface Area               | Not Applicable                         |
| Dustiness                  | Not Applicable                         |
| Hygroscopicity             | Not Applicable                         |
| pH                         | Not Available                          |
| Melting Point              | Not characterized for the 70% solution |
| Boiling Point              | Not characterized for the 70% solution |
| Flash Point                | Not Available                          |
| Vapor Pressure             | Not Available                          |
| Specific Gravity           | 1.413                                  |
| Solubility                 | Soluble in water                       |
| Molecular Formula          | HNO <sub>3</sub>                       |
| Molecular Weight           | 63.013 g/mol                           |

## 10. STABILITY AND REACTIVITY

|                        |                                                                                   |
|------------------------|-----------------------------------------------------------------------------------|
| Chemical Stability     | Stable under recommended storage conditions.                                      |
| Hazardous Reactions    | None under normal processing conditions.                                          |
| Conditions to Avoid    | Heat, sparks, open flame, and incompatible materials.                             |
| Incompatible Materials | Strong acids, strong bases, reactive metals, water (for some concentrated forms). |
| Decomposition Products | May produce carbon oxides and other toxic fumes when heated to decomposition.     |

## 11. TOXICOLOGICAL INFORMATION

**Acute Toxicity:** See Section 2 for GHS hazard classification.

|      |                           |
|------|---------------------------|
| IARC | Not listed as carcinogen. |
| NTP  | Not listed as carcinogen. |
| OSHA | Not listed as carcinogen. |

## 12. ECOLOGICAL INFORMATION

|             |                                                                                                                                                                                                         |
|-------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Ecotoxicity | Daphnia EC50: ~ 100 mg/L (48 h, Marine invertebrates — pH-driven; Carcinus maenas 180, Asterias rubens 100–300 mg/L); Fish LC50: ~ 100 mg/L (48 h, Agonus cataphractus — pH-driven; range 100–330 mg/L) |
|-------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|                         |                                                                       |
|-------------------------|-----------------------------------------------------------------------|
| <b>Persistence</b>      | Not applicable (inorganic; dissociates to nitrate and hydronium ions) |
| <b>Bioaccumulation</b>  | log Kow -0.21                                                         |
| <b>Mobility in Soil</b> | High; mobile toward groundwater after partial neutralization          |

### 13. DISPOSAL CONSIDERATIONS

Dispose of contents/container in accordance with applicable federal, state, and local regulations. Do not dispose of into drains or waterways.

### 14. TRANSPORT INFORMATION

|                         |                                                                                                                                |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------|
| <b>US DOT</b>           | UN2031, Nitric acid, other than red fuming, with at least 65 percent, but not more than 70 percent nitric acid, 8 (5.1), PG II |
| <b>IMDG</b>             | UN2031, Nitric acid, other than red fuming, with at least 65 percent, but not more than 70 percent nitric acid, 8 (5.1), PG II |
| <b>IATA/ICAO</b>        | UN2031, Nitric acid, other than red fuming, with at least 65 percent, but not more than 70 percent nitric acid, 8 (5.1), PG II |
| <b>Marine Pollutant</b> | No                                                                                                                             |

### 15. REGULATORY INFORMATION

|                                                                                                                       |                                           |
|-----------------------------------------------------------------------------------------------------------------------|-------------------------------------------|
| Regulatory listings not yet on file in this system; consult OSHA, EPA TSCA, EPCRA TRI, and California OEHHA directly. |                                           |
| <b>SARA 311/312</b>                                                                                                   | See Section 2 for hazard classifications. |

### 16. OTHER INFORMATION

**Revision Date:** 07/22/2026

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