

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** Nitric Acid 65%ACS Grade

**Synonyms:** Aqua Fortis, nitric acid

**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 | 65% w/w | 65% w/w | 7697-37-2 | 231-714-2         | HNO <sub>3</sub> | 63.013 g/mol     |
| Water       | 35      | 35      | 7732-18-5 | 231-791-2         | H <sub>2</sub> O | 18.02 g/mol      |

### 4. FIRST-AID MEASURES

|                   |                                                                                                                                                                                                                                                                                     |
|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Eyes</b>       | Eye: IRRIGATE IMMEDIATELY - If this chemical contacts the eyes, immediately wash (irrigate) the eyes with large amounts of water, occasionally lifting the lower and upper lids. Get medical attention immediately.                                                                 |
| <b>Skin</b>       | Skin: WATER FLUSH IMMEDIATELY - If this chemical contacts the skin, immediately flush the contaminated skin with water. If this chemical penetrates the clothing, immediately remove the clothing and flush the skin with water. Get medical attention promptly.                    |
| <b>Inhalation</b> | Breathing: RESPIRATORY SUPPORT - If a person breathes large amounts of this chemical, move the exposed person to fresh air at once. If breathing has stopped, perform artificial respiration. Keep the affected person warm and at rest. Get medical attention as soon as possible. |
| <b>Ingestion</b>  | Swallow: MEDICAL ATTENTION IMMEDIATELY - If this chemical has been swallowed, get medical attention immediately. (NIOSH, 2024)                                                                                                                                                      |

### 5. FIRE-FIGHTING MEASURES

|                             |                                                                                  |
|-----------------------------|----------------------------------------------------------------------------------|
| <b>Suitable Media</b>       | Dry chemical, CO <sub>2</sub> , water spray. Use water spray to cool containers. |
| <b>Unsuitable Media</b>     | Do not use a solid water stream as it may scatter and spread fire.               |
| <b>Protective Equipment</b> | Wear self-contained breathing apparatus and full protective clothing.            |
| <b>Combustion Products</b>  | May include carbon oxides and other toxic fumes. See Section 10.                 |

### 6. ACCIDENTAL RELEASE MEASURES

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

### 7. HANDLING AND STORAGE

|                      |                                                                                                                                                                         |
|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Safe Handling</b> | Use with adequate ventilation. Avoid contact with skin, eyes, and clothing. Wash thoroughly after handling. Keep container closed when not in use.                      |
| <b>Safe Storage</b>  | 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                 |

|                   |                                                                                                                                                                                                                                                                                           |
|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Eyes</b>       | Wear chemical safety goggles or face shield.                                                                                                                                                                                                                                              |
| <b>Skin</b>       | Wear chemical-resistant gloves and protective clothing.                                                                                                                                                                                                                                   |
| <b>Inhalation</b> | 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

|                                 |                                        |
|---------------------------------|----------------------------------------|
| <b>Appearance</b>               | Colorless to pale yellow liquid        |
| <b>Odor</b>                     | Characteristic choking odor            |
| <b>Particle Characteristics</b> | Not Applicable                         |
| <b>pH</b>                       | Not Available                          |
| <b>Melting Point</b>            | Not characterized for the 65% solution |
| <b>Boiling Point</b>            | Not characterized for the 65% solution |
| <b>Flash Point</b>              | Not Available                          |
| <b>Vapor Pressure</b>           | 48 mmHg (NIOSH, 2024)                  |
| <b>Specific Gravity</b>         | 1.391                                  |
| <b>Solubility</b>               | Soluble in water, alcohol, and ether   |
| <b>Molecular Formula</b>        | HNO <sub>3</sub>                       |
| <b>Molecular Weight</b>         | 63.013 g/mol                           |

## 10. STABILITY AND REACTIVITY

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

## 11. TOXICOLOGICAL INFORMATION

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

|             |                           |
|-------------|---------------------------|
| <b>IARC</b> | Not listed as carcinogen. |
| <b>NTP</b>  | Not listed as carcinogen. |
| <b>OSHA</b> | Not listed as carcinogen. |

## 12. ECOLOGICAL INFORMATION

|                         |                                                                                                                                                                                                         |
|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Ecotoxicity</b>      | 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

|                  |                                                                                                                                |
|------------------|--------------------------------------------------------------------------------------------------------------------------------|
| US DOT           | 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 |
| IMDG             | 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 |
| IATA/ICAO        | 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 |
| Marine Pollutant | No                                                                                                                             |

### 15. REGULATORY INFORMATION

|                    |                                           |
|--------------------|-------------------------------------------|
| TSCA Inventory     | Listed.                                   |
| SARA 313 (TRI)     | Listed (de minimis 1.0%).                 |
| California Prop 65 | Not listed.                               |
| SARA 311/312       | See Section 2 for hazard classifications. |

Data retrieved as of — TSCA Inventory: 2026-07-30; SARA 313 (TRI): 2026-07-30; California Prop 65: 2026-07-30

### 16. OTHER INFORMATION

**Revision Date:** 07/30/2026

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