

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Nitric Acid 65%ACS Grade

Synonyms: NITRIC ACID, Azotic acid, Aqua fortis, Salpetersaeure, Nital

CAS Number: 7697-37-2

Grade/Purity: ACS Reagent

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

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

2. HAZARDS IDENTIFICATION

Signal Word: Danger

GHS Pictograms:



Hazard Statements:

H272	May intensify fire; oxidizer [Danger Oxidizing liquids; Oxidizing solids]
H314	Causes severe skin burns and eye damage [Danger Skin corrosion/irritation]
H330	Fatal if inhaled [Danger Acute toxicity, inhalation]
H271	May cause fire or explosion; strong oxidizer

Precautionary Statements:

P210,	P220, P260, P264, P271, P280, P284, P301+P330+P331, P302+P361+P354, P304+P340, P305+P354+P338, P316, P320, P321, P363, P370+P378, P403+P233, P405, and P501
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3. COMPOSITION / INFORMATION ON INGREDIENTS

COMPONENT	CAS #	FORMULA	MOLECULAR WEIGHT	CONCENTRATION
Nitric Acid	7697-37-2	HNO ₃	63.01 g/mol	65% w/w
Water	7732-18-5	H ₂ O	18.02 g/mol	35%

4. FIRST-AID MEASURES

Eyes	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.
Skin	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.
Inhalation	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.
Ingestion	Swallow: MEDICAL ATTENTION IMMEDIATELY - If this chemical has been swallowed, get medical attention immediately. (NIOSH, 2024)

5. FIRE-FIGHTING MEASURES

Suitable Media	Dry chemical, CO2, 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: NITRIC ACID ignites upon contact with alcohols, amines, ammonia, beryllium alkyls, boranes, dicyanog. 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	2.0 [ppm]
NIOSH REL	2 ppm (5 mg/m ³)
IDLH	25.0 [ppm]

Eyes	Wear chemical safety goggles or face shield.
Skin	Wear chemical-resistant gloves and protective clothing.
Inhalation	Use NIOSH-approved respirator if exposure limits are exceeded or irritation occurs.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Colorless to pale yellow liquid
Odor	Characteristic choking odor
pH	Not Available
Melting Point	-42°C (-44°F)
Boiling Point	121°C (250°F)
Flash Point	Not Available
Vapor Pressure	48 mmHg (NIOSH, 2024)
Specific Gravity	1.5 at 77 °F (NIOSH, 2024) - Denser than water; will sink
Solubility	Soluble in water, alcohol, and ether
Molecular Formula	HNO ₃
Molecular Weight	63.01 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	NITRIC ACID ignites upon contact with alcohols, amines, ammonia, beryllium alkyls, boranes, dicyanogen, hydrazines, hydrocarbons, hydrogen, nitroalkanes, powdered metals, silanes, or thiols [Bretheric
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	Fish LC50: LC50; Species: Asterias rubens (Starfish); Conditions: renewal, /aerated water/; Concentration: 100-300 mg/L for 48 hr [PubChem]
Persistence	Not Available
Bioaccumulation	Not Available
Mobility in Soil	Not Available

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, 8 (5.1), PG II
IMDG	UN2031, NITRIC ACID, 8 (5.1), PG I, Tunnel (E)
IATA/ICAO	UN2031, NITRIC ACID, 8 (5.1), PG II Passenger: Forbidden; Cargo only: 30 L (PI 855)
Marine Pollutant	No

15. REGULATORY INFORMATION

TSCA Inventory	All ingredients are listed on the TSCA Active inventory.
California Prop 65	Refer to California Proposition 65 list for current status.
SARA 311/312	See Section 2 for hazard classifications.
SARA 313	Refer to EPA Toxic Release Inventory for current listing status.

16. OTHER INFORMATION

Revision Date: 02/10/2026

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