



NEWAY SINOPHC TECH. LIMITED

ADD:RM. 204, BUILDING 3, NO. 188, AONA RD., CHINA (SHANGHAI) PILOT FREE TRADE ZONE.
Email:marketing01@newayphc.com; Phone:+86-021-50350029 <https://www.newayphc.com>

Safety Data Sheet (MSDS)

(According to GB/T 16483, GB/T 17519, and GHS Standards)

SECTION 1: Identification

1.1 Product Identifiers

- Product Name: Nitric Acid (68% Aqueous Solution)
- Product Number:NIT-20260210
- Brand:TECHPURE
- CAS-No.:7697-37-2
- Synonyms: Aqua Fortis; Nitric Acid Solution

1.2 Details of the supplier of the safety data sheet

- Company : NEWAY SINOPHC TECH. LIMITED
- RM. 204, BUILDING 3, NO. 188, AONA RD., CHINA (SHANGHAI)PILOT FREE TRADE ZONE.
- Telephone : +86-021-50350029
- Fax : +86-021-50350029

1.3 Emergency telephone

Emergency Phone # : +86-021-50350029
(CHEMTREC)

1.4 Uses & Restrictions

- Identified Uses: Chemical synthesis, metal processing, laboratory reagent.
- Uses Advised Against: Food contact, medicinal purposes, unventilated enclosed space use.

SECTION 2: Hazards Identification

2.1 GHS Classification

- Corrosive to metals (Category 1)
- Skin corrosion/irritation (Category 1A)
- Eye damage/eye irritation (Category 1)
- Acute toxicity - Inhalation (Category 3)
- Oxidizing liquids (Category 3)
- Aquatic toxicity (Category 1)

2.2 GHS Label Elements

- Hazard Pictogram: Corrosion; Oxidizer; Environment; Skull and crossbones
- Signal Word: Danger
- Hazard Statements: H290 (May be corrosive to metals); H314 (Causes severe skin burns and eye damage); H331 (Toxic if inhaled); H272 (May intensify fire); H400 (Very toxic to aquatic life)
- Precautionary Statements: P210 (Keep away from heat/sparks); P260 (Do not breathe vapor); P280 (Wear protective gloves/eye/face/respiratory protection); P304+P340 (If inhaled: Remove to fresh air)

SECTION 3: Composition/Information on Ingredients

- Substance / Mixture: Mixture



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- Active Component: Nitric Acid (CAS 7697-37-2)
- Concentration: 68.0 ± 1.0%
- Diluent: Deionized Water (31.0-32.0%)
- Impurities: ≤ 0.5% (Free sulfuric acid, trace metals)

SECTION 4: First Aid Measures

- Inhaled: Move to fresh air; give oxygen if needed; seek emergency medical attention.
- Skin Contact: Remove contaminated clothing; rinse skin with plenty of running water for 15-20 minutes.
- Eye Contact: Hold eyes open; rinse continuously with plenty of running water for 15 minutes; seek emergency medical attention.
- Swallowed: Do not induce vomiting; rinse mouth with water; seek immediate medical attention.

SECTION 5: Firefighting Measures

- Suitable Extinguishing Media: Dry powder, CO₂, foam, water spray.
- Special Hazards: Strong oxidizer; intensifies fire when in contact with organics; toxic fumes (NO_x) when burned.
- Advice for Firefighters: Wear self-contained breathing apparatus and full protective clothing.

SECTION 6: Accidental Release Measures

- Personal Precautions: Evacuate non-essential personnel; wear full PPE; eliminate ignition sources.
- Environmental Precautions: Prevent entry into drains/watercourses; neutralize with alkaline absorbents.
- Clean-Up Methods: Small spills: Absorb with inert alkaline materials; large spills: Contain and transfer to sealed containers.

SECTION 7: Handling and Storage

- Handling: Operate in well-ventilated areas with corrosion-resistant equipment; use anti-static tools.
- Storage: Cool, dry, well-ventilated warehouse (≤ 30°C); sealed, away from heat/sparks/organics/reducers.
- Incompatibilities: Organic substances, reducing agents, metals, strong bases.

SECTION 8: Exposure Controls/Personal Protection

- PPE: Chemical safety goggles/face shield; nitrile rubber gloves; chemical-resistant clothing; acid gas respirator.
- Exposure Limits: TWA (8h): 2 ppm (OSHA); STEL (15min): 4 ppm (OSHA).

SECTION 9: Physical and Chemical Properties

- Physical State: Liquid; Color: Colorless to pale yellow; Odor: Pungent
- Melting Point: -42°C; Boiling Point: 121°C; Density (20°C): 1.410 g/cm³
- Viscosity (20°C): 1.0 mPa·s; Vapor Pressure (25°C): 4.8 kPa



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- Corrosivity: Highly corrosive to steel, aluminum, and tissues.

SECTION 10: Stability and Reactivity

- Stability: Stable under normal conditions; decomposes at high temperature to release NO_x.
- Hazardous Reactions: Reacts violently with organics, reducers, and metals.

SECTION 11: Toxicological Information

- Acute Toxicity: Inhalation (Rat, LC₅₀): 49 ppm (4h); Oral (Rat, LD₅₀): 90 mg/kg
- Skin/Eye Corrosion: Severe skin burns; permanent eye damage risk.

SECTION 12: Ecological Information

- Aquatic Toxicity: Fish (Zebrafish, LC₅₀): 50 mg/L (96h); Daphnia (EC₅₀): 80 mg/L (48h)
- Biodegradability: Non-biodegradable; neutralize before disposal.

SECTION 13: Disposal Considerations

- Product Waste: Dispose as hazardous waste; neutralize with alkali before disposal.
- Packaging Waste: Rinse with water; dispose as hazardous waste or recycle.

SECTION 14: Transport Information

- UN Number: 2031
- UN Proper Shipping Name: NITRIC ACID, 68% SOLUTION
- Transport Hazard Class: 8 (Corrosive) + 5.1 (Oxidizing); Packaging Group: II
- Marine Pollutant: Yes

SECTION 15: Regulatory Information

- National Regulations: Hazardous Chemical Safety Management Regulation; Environmental Protection Law.
- International Regulations: GHS (Rev. 9); REACH (EU, listed); TSCA (US, listed); IMDG Code.

SECTION 16: Other Information

- Revision Date:10 FEB 2026
- Disclaimer: This MSDS is based on current data; supplier not liable for improper use.