



SAFETY DATA SHEET

NITRIC ACID

OSHA HCS 16-Section SDS Summary | Industrial Chemical Supplier Format

SECTION 1: IDENTIFICATION

Product identifier	Nitric Acid
Manufacturer / Distributor	BASEKIM KIMYASAL URUNLER IC VE DIS TICARET LIMITED SIRKETI
Address	ILKBAHAR MAH. FAHREDDIN PASA SK. NO: 6 CANKAYA/ANKARA
Telephone	+903125147055
Emergency telephone	+903125147055
Recommended use	Industrial manufacturing
Restrictions on use	For professional use only

SECTION 2: HAZARD(S) IDENTIFICATION

GHS classification	Oxidizing liquids Category 3; Skin corrosion Category 1A; Serious eye damage Category 1; Corrosive to metals Category 1
Signal word	DANGER
GHS pictograms	GHS03 Flame over circle; GHS05 Corrosion

- **Hazard statements:** May intensify fire; oxidizer. May be corrosive to metals. Causes severe skin burns and eye damage. Nitrogen oxides may be released on heating or contact with metals/organic materials.
- **Precautionary statements:** Keep away from heat, combustible materials, metals, bases, reducing agents and organic substances. Wear chemical-resistant gloves, protective clothing, eye protection and face protection. Do not breathe mist or vapors.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS number	Concentration / Identifier
Nitric acid	7697-37-2	Commercial aqueous solution; concentration varies by grade
Water	7732-18-5	Balance, where applicable

SECTION 4: FIRST-AID MEASURES

- **Eye contact:** Immediately rinse cautiously with water for at least 15 minutes. Remove contact lenses if present and easy to do. Obtain urgent medical attention.



- **Skin contact:** Remove contaminated clothing immediately. Rinse skin with plenty of water/shower for at least 15 minutes. Obtain medical attention.
- **Inhalation:** Move person to fresh air and keep comfortable for breathing. Oxygen or artificial respiration may be required by trained personnel. Obtain medical attention immediately.
- **Ingestion:** Do not induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. Obtain urgent medical attention.
- **Symptoms/effects:** Severe burns, eye damage, respiratory irritation, delayed pulmonary effects after inhalation of mist or nitrogen oxides.

SECTION 5: FIRE-FIGHTING MEASURES

- **Suitable extinguishing media:** Use water spray, foam, dry chemical or carbon dioxide appropriate for surrounding fire. Use water spray to cool exposed containers.
- **Unsuitable media:** Do not use methods that may spread contaminated acidic liquid.
- **Specific hazards:** Strong oxidizer; may intensify fire. Thermal decomposition can release toxic nitrogen oxides.
- **Protective equipment:** Firefighters should wear self-contained breathing apparatus and full chemical protective clothing.

SECTION 6: ACCIDENTAL RELEASE MEASURES

- **Personal precautions:** Evacuate unnecessary personnel. Avoid breathing mist/vapor and avoid contact with skin, eyes and clothing.
- **Protective equipment:** Use acid-resistant gloves, chemical suit/apron, goggles, face shield and respiratory protection where ventilation is inadequate.
- **Containment:** Stop leak if safe. Dike with inert, non-combustible absorbent. Keep away from drains and combustible materials.
- **Cleanup:** Neutralize cautiously with suitable alkaline material by trained personnel. Collect residues in compatible labeled containers for disposal.

SECTION 7: HANDLING AND STORAGE

- **Safe handling:** Use only with adequate ventilation. Add acid to water; never add water to concentrated acid. Keep away from combustible and reducing materials.
- **Hygiene:** Do not eat, drink or smoke when handling. Wash hands and exposed skin thoroughly after use.
- **Storage:** Store locked up in a cool, dry, well-ventilated corrosives area. Keep container tightly closed in acid-compatible materials.
- **Incompatibilities:** Bases, metals, organic materials, reducing agents, combustible materials, cyanides, sulfides and strong alkalis.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Substance	OSHA PEL	ACGIH TLV
Nitric acid	2 ppm TWA; 5 mg/m ³ TWA	2 ppm TWA; 4 ppm STEL

- **Engineering controls:** Use local exhaust ventilation, closed transfer systems and emergency eyewash/safety shower stations near work areas.
- **Eye/face protection:** Chemical splash goggles plus face shield.



- **Skin protection:** Acid-resistant gloves, protective clothing, apron and boots.
- **Respiratory protection:** Use an approved respirator suitable for acid gases/mists when exposure limits may be exceeded.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Colorless to yellowish liquid
Odor	Acrid, choking odor
Odor threshold	Not available
pH	< 1 (aqueous acidic solution)
Melting/freezing point	Approx. -42 °C for pure acid; varies by concentration
Initial boiling point	Approx. 83 °C for pure acid; varies by concentration
Flash point	Not flammable
Evaporation rate	Not available
Flammability	Not applicable; oxidizing liquid
Vapor pressure	Approx. 48 mmHg at 20 °C for pure acid
Relative density	Approx. 1.41 at 20 °C for concentrated acid
Solubility	Completely miscible with water
Partition coefficient	Not applicable
Auto-ignition temperature	Not applicable
Decomposition temperature	May decompose on heating, releasing nitrogen oxides
Viscosity	Not available

SECTION 10: STABILITY AND REACTIVITY

- **Reactivity:** Strong oxidizing acid; reacts violently with bases, metals, reducing agents and many organic substances.
- **Chemical stability:** Stable under recommended storage and handling conditions.
- **Hazardous reactions:** May generate heat, toxic nitrogen oxides and flammable hydrogen with certain metals.
- **Conditions to avoid:** Heat, direct sunlight, contamination, incompatible materials and confined contact with combustibles.
- **Hazardous decomposition products:** Nitrogen oxides, acidic fumes.

SECTION 11: TOXICOLOGICAL INFORMATION

- **Routes of exposure:** Inhalation, skin contact, eye contact and ingestion.
- **Symptoms:** Burning pain, redness, severe tissue damage, coughing, choking, shortness of breath and possible delayed lung injury.



- **Acute effects:** Severe skin corrosion and serious eye damage. Inhalation of mist may cause severe respiratory tract irritation or pulmonary edema.
- **Chronic effects:** Repeated exposure to acidic mist may affect teeth and respiratory tract.
- **Numerical toxicity:** Published acute toxicity values vary by concentration and route; evaluate according to the supplied product concentration and local regulatory classification.

SECTION 12: ECOLOGICAL INFORMATION

- **Ecotoxicity:** May be harmful to aquatic life due to low pH. Neutralization can reduce acidity hazard.
- **Persistence/degradability:** Inorganic acid; not subject to biodegradation in the usual sense.
- **Bioaccumulative potential:** Not expected to bioaccumulate.
- **Mobility:** Highly mobile in water due to complete miscibility.
- **Other adverse effects:** Large releases may alter environmental pH and damage aquatic ecosystems.

SECTION 13: DISPOSAL CONSIDERATIONS

- **Waste treatment:** Dispose of contents/container according to local, regional, national and international regulations.
- **Contaminated packaging:** Rinse or neutralize only by trained personnel. Do not reuse empty containers unless professionally cleaned.
- **Disposal caution:** Do not discharge untreated acid to drains, soil or surface water.

SECTION 14: TRANSPORT INFORMATION

Transport item	Information	Notes
UN number	UN 2031	Nitric acid, other than red fuming
Proper shipping name	Nitric acid	Classification depends on concentration
Hazard class	8; subsidiary risk 5.1 where applicable	Corrosive / oxidizing
Packing group	II	Common for many nitric acid solutions
Environmental hazards	Not generally listed as marine pollutant	Verify by concentration and modal rules

SECTION 15: REGULATORY INFORMATION

- **OSHA HCS:** Classified as hazardous under the OSHA Hazard Communication Standard.
- **GHS labeling:** Corrosion and oxidizer pictograms, Danger signal word and corrosive/oxidizing hazard statements apply based on concentration.
- **Inventory status:** Nitric acid is widely listed on major chemical inventories; verify for jurisdiction and exact grade.
- **User responsibility:** The receiver must ensure compliance with applicable country,



transport, workplace and environmental regulations.

SECTION 16: OTHER INFORMATION

Date of preparation / revision	12 May 2026
Prepared for	BASEKIM KIMYASAL URUNLER IC VE DIS TICARET LIMITED SIRKETI
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Disclaimer	This document is a professional SDS summary for industrial communication. It does not replace the supplier's full legally issued SDS for the exact product grade and concentration.