

NITRIC ACID

HNO₃



CAS Number: 7697-37-2

Packing Group: II

Packing Size: 900 L / 1270 Kg

Product Overview

A highly corrosive and oxidizing mineral acid. Pure solutions are colourless, but as the solution ages and decomposes into oxides of nitrogen and water, it acquires a yellowish colour. Nitric acid is formed by reacting nitrogen dioxide with water. Because nitric acid is a strong oxidizing agent, it reacts violently with many organic materials and these reactions may be explosive. The main application of HNO₃ is for the manufacture of fertilizers and explosives. In addition to these uses, nitric acid is useful as a precursor (in the synthesis of organic nitrogen compounds), rocket propellant, oxidant, analytical reagent, etchant, cleaning agent, and for metal processing and woodworking.

Handling

- Wash thoroughly after handling. Remove any contaminated clothing and wash before reuse.
- Avoid secondary contamination by removing/discarding ALL contaminated wear.
- When diluting nitric acid, slowly and carefully add the acid to water. DO NOT reverse this action.
- Do not eat, drink, or smoke while handling HNO₃.

First-aid

Inhalation - move individual(s) to fresh air.

Eye Contact - Immediately flush eyes with plenty of water for at least 15 minutes to prevent further damage.

Skin Contact - Immediately remove contaminated clothing and wash with soap. Flush the affected area with plenty of water for at least 15 minutes.

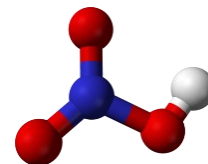
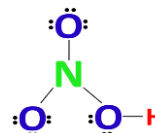
Ingestion - DO NOT induce vomiting. Rinse the mouth with water and give a glass of water or milk. NEVER perform CPR on an unconscious person unless proper equipment and trained personnel is available.

*****Immediately after performing the actions listed above, seek medical help! *****

Density (p): 1.41

UN Number: UN 2031

Hazard Class: 8, 5.1



Safety

- ALWAYS wear PPE when working with HNO₃: goggles/face shield, rubber gloves, apron/ long clothing, rubber boots/ closed footwear, respiratory protection if exposure limits are exceeded
- Follow safety procedures to avoid accidents
- Awareness of the chemical properties of HNO₃
- First-Aid kit should be readily available
- Do not breathe dust, mist, or vapor. Do not get in eyes, on skin, or on clothing.

Storage

- Store in a cool, dry, well-ventilated area away from incompatible substances.
- DO NOT store near combustible materials OR in direct sunlight.
- Keep the container(s) tightly closed when not in use.
- Keep away from metals, alkalis, and organic materials.
- Inspect containers and storage areas regularly for damage, evidence of leaks, or corrosion

Transport

- Transport in acid-resistant or stainless-steel containers
- Use a trolley and/or forklift for transport within the facility.
- DO NOT transport with incompatible materials
- Follow proper packing group instruction.