

Concentrated NITRIC ACID MSDS

Nitric Acid 98%

1. IDENTIFICATION OF THE SUBSTANCE

PRODUCT NAME Nitric Acid 98%

2. HAZARDS IDENTIFICATION

Contact with combustible material may cause fire. Causes severe burns.

CLASSIFICATION C;R35. O;R8.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Name	EC No.	CAS-No.	Content	Classification
NITRIC ACID ...%	231-714-2	7697-37-2	70-100 %	O;R8 C;R35

The Full Text for all R-Phrases are Displayed in Section 16

4. FIRST-AID MEASURES

INHALATION

Move the exposed person to fresh air at once. Rinse nose and mouth with water.

Keep the affected person warm and at rest.

Get prompt medical attention.

INGESTION

Remove victim immediately from source of exposure. Immediately rinse mouth and drink plenty of water. Call an ambulance and take these instructions. Do not induce vomiting.

SKIN CONTACT

Remove contaminated clothing. Important to remove the substance from the skin immediately. Rinse the skin immediately with lots of water. Get medical attention.

EYE CONTACT

Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyes wide apart. Continue to rinse for at least 15 minutes and get medical attention.

5. FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA

Fire can be extinguished using: Water spray. Powder.

UNUSUAL FIRE & EXPLOSION HAZARDS

OXIDISING! May ignite other combustible materials.

SPECIFIC HAZARDS

Nitric acid (HNO₃). Oxides of: Nitrogen.

PROTECTIVE MEASURES IN FIRE

Self contained breathing apparatus and full protective clothing must be worn in case of fire.

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS

Follow precautions for safe handling described in this safety data sheet. Avoid inhalation of vapours and contact with skin and eyes.

ENVIRONMENTAL PRECAUTIONS

Do not discharge into drains, water courses or onto the ground.

SPELL CLEAN UP METHODS

Bund material with inert material, carefully dilute with water spray to minimize fume emission and heat generation. Carefully neutralize using excess of slaked lime or soda ash to form slurry. Take up slurry into plastic containers and hold for disposal.

7. HANDLING AND STORAGE

USAGE PRECAUTIONS

Avoid spilling, skin and eye contact. Mechanical ventilation or local exhaust ventilation is required. Eye wash facilities and emergency shower must be available when handling this product.

STORAGE PRECAUTIONS

Store in tightly closed original container in a dry, cool and well-ventilated place. Suitable containers Stainless steel.

STORAGE CLASS

Corrosive storage.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Name	Std	TWA - 8 hrs	STEL - 15 min	Notes
NITRIC ACID ...%			1 ppm 2.6 mg/m ³	
Mg/m ³				

RESPIRATORY EQUIPMENT

No specific recommendation made, but respiratory protection must be used if the general level exceeds the Recommended Workplace Exposure Limit. Chemical respirator with specific cartridge providing protection against the compound of concern.

HAND PROTECTION

Wear protective gloves.

EYE PROTECTION

Goggles/face shield are recommended.

OTHER PROTECTION

Wear rubber apron. Wear rubber footwear. Provide eyewash station and safety shower.

HYGIENE MEASURES

Wash contaminated clothing before reuse. Wash promptly if skin becomes contaminated. Wash hands after handling. When using do not eat, drink or smoke.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	Liquid
COLOUR	Colourless to Yellowish
ODOUR	Pungent Fuming
SOLUBILITY	Soluble in water The product reacts with water and will generate heat.
BOILING POINT (°C)	89
MELTING POINT (°C)	<-49
RELATIVE DENSITY	1.42 - 1.502
VAPOUR PRESSURE	51 mm Hg 20°C
pH-VALUE, CONC. SOLUTION	<1

10. STABILITY AND REACTIVITY

STABILITY

Avoid: Contact with combustibles.

CONDITIONS TO AVOID

Avoid excessive heat for prolonged periods of time.

MATERIALS TO AVOID

Strong alkalis. Strong reducing agents. Powdered metal.

HAZARDOUS DECOMPOSITION PRODUCTS

Nitric acid (HNO₃). Oxides of: Nitrogen.

11. TOXICOLOGICAL INFORMATION

INHALATION

Irritating to respiratory system. Vapours may irritate the respiratory system and cause coughing, asthmatic breathing and breathlessness.

INGESTION

Causes severe burns. Swallowing concentrated chemical may cause severe internal injury. Ingestion may cause severe irritation of the mouth, the oesophagus and the gastrointestinal tract.

SKIN CONTACT

Causes severe burns. Corrosive. Prolonged contact causes serious tissue damage.

EYE CONTACT

Causes severe burns. Contact with concentrated chemical may very rapidly cause severe eye damage, possibly loss of sight.

12. ECOLOGICAL INFORMATION

ECOTOXICITY

Dangerous for the environment if discharged into watercourses. The product contains a substance which is harmful to aquatic organisms.

MOBILITY

The product is soluble in water. Mobile.

BIOACCUMULATION

The product does not contain any substances expected to be bioaccumulating.

DEGRADABILITY

The product is expected to be slowly biodegradable.

13. DISPOSAL CONSIDERATIONS

GENERAL INFORMATION

When handling waste, consideration should be made to the safety precautions applying to handling of the product. Do not puncture or incinerate even when empty.

DISPOSAL METHODS

Dispose of waste and residues in accordance with local authority requirements.

14. TRANSPORT INFORMATION

PROPER SHIPPING NAME NITRIC ACID

15. REGULATORY INFORMATION

CONTAINS NITRIC ACID 98%

RISK PHRASES

R8 Contact with combustible material may cause fire.

R35 Causes severe burns.

SAFETY PHRASES

S17 Keep away from combustible material.

S24/25 Avoid contact with skin and eyes.

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

S45 In case of accident or if you feel unwell, seek medical advice immediately (show label where possible).

S60 This material and its container must be disposed of as hazardous waste.

STATUTORY INSTRUMENTS

Chemicals (Hazard Information and Packaging) Regulations.

APPROVED CODE OF PRACTICE

Safety Data Sheets for Substances and Preparations. Classification and Labelling of Substances and Preparations Dangerous for Supply.

GUIDANCE NOTES

CHIP for everyone HSG(108). Workplace Exposure Limits EH40.

16. OTHER INFORMATION

R8 Contact with combustible material may cause fire.

R35 Causes severe burns.

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