



sasol

Safety Data Sheet

Nitric Acid (55 - 61%)

Version 1.01

Revision Date 14.10.2020

SECTION 1. Identification of the substance/mixture and of the company/undertaking

Product identifier

Trade name

Nitric Acid (55 - 61%)

Synonyms

Azotic acid, Engraver's acid, Hydrogen nitrate, Nitryl hydroxide, Aqua fortis

Relevant identified uses of the substance or mixture and uses advised against

Use

Raw material for synthesis processes in the chemical industry. Raw material for fertilizers. Raw material for ammonium nitrate

Manufacturer or supplier's details

Company

Sasol Chemicals, a division of Sasol South Africa Ltd

Address

Sasol Place, 50 Katherine Street
Sandton
2090
South Africa

Telephone

+27103445000

E-mail address

sasolchem.info.sa@sasol.com

Emergency telephone number

+44 (0)1235 239 670 (Europe, Israel, Africa, Americas)
+44(0)1235 239 671 (Middle East, Arabic African countries)
+65 3158 1074 (Asia Pacific)
+86 400 120 6011 (China)
+27 (0)17 610 4444 (South Africa)
0800 112 890 RSA-Local only
+61 (2) 8014 4558 (Australia)

SECTION 2. Hazards identification

Classification of the substance or mixture

Classification

Acute toxicity

Category 3

Skin corrosion

Category 1A

Oxidizing liquids

Category 3

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Label elements

REGULATION (EC) No 1272/2008

Hazard pictograms



Signal word

: Danger

Hazard statements

: H314 Causes severe skin burns and eye damage.
H331 Toxic if inhaled.
H272 May intensify fire; oxidizer.

Precautionary statements

Prevention

P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/ doctor.
P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/ doctor.

Storage

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

Disposal

P501 Dispose of contents/ container to an approved waste disposal plant.

Other hazards

None known.

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SECTION 3. Composition/information on ingredients

Substance

Nitric acid

Contents: ≥ 55.00 - ≤ 61.00 %W/W

CAS-No. 7697-37-2

Index-No. 007-004-00-1

EC-No. 231-714-2

Hazard statements *H272 H314 H330*

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SECTION 4. First aid measures

Description of necessary first-aid measures

Inhalation	Move to fresh air in case of accidental inhalation of vapours. If breathing is irregular or stopped, administer artificial respiration. Monitor breathing, get medical attention immediately. Keep patient warm and at rest.
Skin contact	Wash off immediately with plenty of water for at least 15 minutes. Wash contaminated clothing before re-use. Call a physician immediately.
Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses. Seek medical advice.
Ingestion	Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Call a physician immediately.

Most important symptoms/effects, acute and delayed

Refer to SECTION 11

SECTION 5. Firefighting measures

Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Keep containers and surroundings cool with water spray.
Special hazards arising from the substance or mixture	Use water spray to cool unopened containers. The product itself does not burn.
Special protective equipment for firefighters	Wear self-contained breathing apparatus and protective suit.



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SECTION 6. Accidental release measures

Personal precautions	Use personal protective equipment. Do not breathe vapours or spray mist. Keep people away from and upwind of spill/leak.
Environmental precautions	Prevent product from entering drains. Prevent further leakage or spillage if safe to do so.
Methods for cleaning up	Soak up with inert absorbent material and dispose of as hazardous waste. Prevent product from entering drains. Collect, bind, and pump off spills. Use water spray to cool and disperse vapors, protect personnel, and dilute spills to form non-flammable mixtures. Use neutralizing agents.
Reference to other sections	Refer to section 8 and 13

SECTION 7. Handling and storage

Safe handling advice	Avoid inhalation of vapour or mist. Avoid contact with skin and eyes. Wear personal protective equipment. Always replace cap after use.
Advice on protection against fire and explosion	The product is not explosive. Keep away from incompatibles. In contact with incompatibilities may release explosive hydrogen gas.
Requirements for storage areas and containers	Store in accordance with the particular national regulations. Take measures to prevent the build up of electrostatic charge. Keep in a dry, cool and well-ventilated place. Store in original container. Store in a fireproof area. Do not store next to heat source, in direct sunlight, or elevated storage temperature. Always close the lid.
Advice on common storage	Segregate from metallic powders, carbides, hydrogen sulfide, turpentine, organic acids, and all combustible, organic or other readily oxidizable materials. Storage areas should be periodically checked for corrosion and integrity

SECTION 8. Exposure controls/personal protection

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Components with workplace control parameters

NATIONAL OCCUPATIONAL EXPOSURE LIMITS

Components	Type	Control parameters	Update	Basis
NITRIC ACID	TWA	5 mg/m ³	1995	South Africa RELs
NITRIC ACID	TWA	2 ppm	1995	South Africa RELs
	STEL	10 mg/m ³	1995	South Africa RELs
	STEL	4 ppm	1995	South Africa RELs

Exposure controls

Engineering measures

Provide sufficient air exchange and/or exhaust in work rooms.

Personal protective equipment

Respiratory protection	In case of insufficient ventilation, wear suitable respiratory equipment.
Hand protection	Gloves suitable for permanent contact: Material: natural rubber/natural latex, butyl-rubber, Polyvinylchloride, polychloroprene Break through time: 2 hrs Material thickness: 0.5 mm Unsuitable gloves Material: natural rubber/natural latex, nitrile rubber/nitrile latex
Eye protection	Full face-shield
Skin and body protection	Protective suit Safety shoes
Hygiene measures	Wash hands before breaks and immediately after handling the product.

SECTION 9. Physical and chemical properties

Information on basic physical and chemical properties

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Form	Liquid
State of matter	Liquid; at 20 ° C; 1,013 hPa
Colour	Colourless to yellow
Odour	Sweet to acrid, choking odor
Odour Threshold	No data available
pH	< 1; acidic
Melting point/range	No data available
Boiling point/boiling range	121.5 ° C; constant boiling mixture 68% NHO ₃
Flash point	No data available
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Vapour pressure	11 - 15 hPa; 20 ° C
Relative vapour density	1(Air = 1.0)
Density	1.34 - 1.37 g/cm ³ ; 20 ° C; Hydrometer
Water solubility	Completely soluble, Completely miscible
Viscosity, dynamic	1.5 mPa.s

SECTION 10. Stability and reactivity

Reactivity	Decomposes on heating.Exothermic reaction.Can react explosively with reducing agents, metal powders, Hydrogen sulfide, nitrate, and organic materials.
Chemical stability	Oxidizer. Contact with other material may cause fire.
Possibility of hazardous reactions	May react with oxidizing agents: increased risk of fire and explosion.
Conditions to avoid	Heat, flames and sparks. Keep away from incompatibles. Adding water to acid should be avoided. Exposure to sunlight.
Materials to avoid	Oxidizing agents. Reducing agents. Combustible material. Bases.
Hazardous decomposition products	Heating can cause decomposition and liberate corrosive gas.Nitrogen oxides (NO _x).May generate flammable hydrogen gas. Avoid contact with water, alcohols, acidic, basic, or

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oxidizing materials.

SECTION 11. Toxicological information

Acute inhalation toxicity	Acute toxicity estimate : 4 h; vapour; 5 mg/l; Calculation method; (literature value)
Further Information	Nitric Acid: Ingestion may cause nausea, vomiting, sore throat, stomach-ache and eventually lead to a perforation of the intestine.

SECTION 12. Ecological information

Toxicity to fish	Amphiprion ocellaris; ; 3 Months 97.8 mg/l; Information taken from reference works and the literature.
Chronic toxicity in aquatic invertebrates	static test; Daphnia magna; ; 24 h EC50; 8.609 mg/l; Information taken from reference works and the literature.

SECTION 13. Disposal considerations

Product	Dispose of as hazardous waste in compliance with local and national regulations.
Packaging	Dispose of spent product packaging responsibly and lawfully with due consideration for health, safety and the environment

SECTION 14. Transport information

ADR	
UN number:	2031
Class:	8, (5.1)
Packaging group:	II; CO1;
Proper shipping name:	NITRIC ACID
RID	
UN number:	2031
Class:	8, (5.1)

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Packaging group: I; CO1
Proper shipping name: NITRIC ACID
 (Nitric Acid)

ADNR

UN number: 2031
Class: 8, (5.1)
Packaging group: II; CO1
Proper shipping name: NITRIC ACID

IMDG

UN number: 2031
Class: 8, (5.1)
EmS: F-A, S-Q; IMDG Page: 1
Packaging group: II
Proper shipping name: NITRIC ACID
 (Nitric Acid)

ICAO/IATA

UN number : 2031
Class: 8
Packaging group: II
Proper shipping name: Nitric acid
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code No data available

SECTION 15. Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture

USA TSCA Inventory

All chemical constituents are listed in: USA TSCA Inventory
 (See chapter 3)

Canadian Domestic Substances List (DSL)

All chemical constituents are listed in: Canadian Domestic Substances List (DSL) (See chapter 3)

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Australian Inv. of Chem. Substances (AICS)	All chemical constituents are listed in: Australian Inv. of Chem. Substances (AICS) (See chapter 3)
New Zealand Inventory of Chemicals (NZIoC)	All chemical constituents are listed in: New Zealand Inventory of Chemicals (NZIoC) (See chapter 3)
Jap. Inv. of Exist. & New Chemicals (ENCS)	All chemical constituents are listed in: Jap. Inv. of Exist. & New Chemicals (ENCS) (See chapter 3)
Japan. Industrial Safety & Health Law (ISHL)	All chemical constituents are listed in: Japan. Industrial Safety & Health Law (ISHL) (See chapter 3)
Korea. Existing Chemicals Inventory (KECI)	All chemical constituents are listed in: Korea. Existing Chemicals Inventory (KECI) (See chapter 3)
Philippines Inventory of Chemicals and Chemical Substances (PICCS)	All chemical constituents are listed in: Philippines Inventory of Chemicals and Chemical Substances (PICCS) (See chapter 3)
China Inv. Existing Chemical Substances (IECSC)	All chemical constituents are listed in: China Inv. Existing Chemical Substances (IECSC) (See chapter 3)

SECTION 16. Other information

Full text of H-Statements

H272 May intensify fire; oxidizer.

H314 Causes severe skin burns and eye damage.

H330 Fatal if inhaled.

All reasonable efforts were exercised to compile this SDS in accordance with the Globally Harmonized System of Classification and Labelling of Chemicals (GHS). The SDS only provides information regarding the health, safety and environmental hazards at the date of issue, to facilitate the safe receipt, use and handling of this product in the workplace and does not replace any product information or product specifications. Since Sasol and its subsidiaries cannot anticipate or control all conditions under which this product may be handled, used and received in the workplace, it remains the obligation of each user, receiver or handler to, prior to usage, review this SDS in the context within which this product will be received, handled or used in the workplace. The user, handler or receiver must ensure that the necessary mitigating measures are in place with respect to health and safety. This does not substitute the need or requirement for any relevant risk assessments to be conducted. It further



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remains the responsibility of the receiver, handler or user to communicate such information to all relevant parties that may be involved in the receipt, use or handling of this product.

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