

Vickers Laboratories Ltd - SAFETY DATA SHEET - 4160

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

1.1 Product identifier

Product Name: NITRIC ACID 5.0M
Product Part Number: 4160
CAS Number: 7697-37-2
EC Number: 231-714-2
REACH Registration Number: This product is either exempt from REACH or does not meet the minimum volume threshold for a chemical safety assessment (CSA)
UFI: 7NK6-98AR-URHY-GEUJ

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

Use of the substance/
mixture: For industrial use only

Use of the substance/
mixture: Reagent

1.3 Details of the supplier of the safety data sheet

Name of Supplier: Vickers Laboratories Ltd
Address of Supplier: Grangefield Industrial Estate
Richardshaw Road
Pudsey
West Yorkshire
LS28 6QW
UNITED KINGDOM



Telephone: +44 (0)113 236 2811
Email: safety@viclabs.co.uk

1.4 Emergency telephone number

Emergency Telephone: +44 (0)113 236 2811 (Mon-Fri 08:00-16:30 (UK))
112 (24hr)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

CLP: Acute Tox. 3 Skin Corr. 1A

2.2 Label elements



GHS05



GHS06

Signal Word: Danger

Hazard statements

H314: Causes severe skin burns and eye damage.
H331: Toxic if inhaled.

Precautionary statements

P280: Wear protective gloves/protective clothing/eye protection/face protection.
P260: Do not breathe dust/fume/gas/mist/vapours/spray.
P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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SECTION 2: Hazards identification

2.3 Other hazards

None.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Nitric Acid [$C \leq 70 \%$]

CAS Number: 7697-37-2

EC Number: 231-714-2

Concentration: $30 \leq C < 35 \%$

Specific Concentration Limits: Ox. Liq. 3; H272: $C \geq 65 \%$ inhalation: ATE = 2,65 mg/L (vapours)
Skin Corr. 1A; H314: $C \geq 20 \%$ Skin Corr. 1B; H314: $5 \leq C < 20 \%$

Categories: Ox. Liq. 3 Acute Tox. 3 Skin Corr. 1A

Symbols: GHS03;GHS06;GHS05

H Statements: H272; H331; H314; EUH071

SECTION 4: First aid measures

4.1 Description of first aid measures

Contact with eyes

If substance has got into eyes, immediately wash out with plenty of water for at least 15 minutes. Seek immediate medical attention.

Contact with skin

After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water. Seek immediate medical attention.

Inhalation

Remove patient to fresh air. If breathing is difficult, oxygen should be given by a trained person. Apply artificial respiration only if patient is not breathing. Seek immediate medical attention.

Ingestion

Never give anything by mouth to an unconscious person. Give plenty of water to drink. Do not induce vomiting. Obtain immediate medical attention.

4.2 Most important symptoms and effects, both acute and delayed

No information available.

4.3 Indication of any immediate medical attention and special treatment needed

No information available.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Not flammable. In case of fire use extinguishing media appropriate to surrounding conditions.

5.2 Special hazards arising from the substance or mixture

May give off noxious and toxic fumes in a fire.

5.3 Advice for firefighters

Evacuate the area and keep personnel upwind. Wear chemical protection suit and positive-pressure breathing apparatus.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

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SECTION 6: Accidental release measures

Evacuate the area and keep personnel upwind. Wear protective clothing as per section 8.

6.2 Environmental precautions

Do not allow to enter public sewers and watercourses. If contamination of drainage systems or water courses is unavoidable, immediately inform appropriate authorities.

6.3 Methods and material for containment and cleaning up

Absorb spillage in suitable inert material. Do not absorb spillage in sawdust or other combustible material. Neutralise with Soda ash. Place in sealable container. To clean the floor and all objects contaminated by this material use water.

6.4 Reference to other sections

See Section 8.2.

See Section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Do not breathe spray/mists. Keep away from clothing and other combustible materials. Ensure adequate ventilation. Wear protective clothing as per section 8.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed and dry. Keep in a cool, dry, well ventilated place. Keep away from clothing and other combustible materials.

7.3 Specific end use(s)

See Section 1.2.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Substances	CAS Number:	Concentration	WEL (long term):	WEL (short term):
Nitric acid	7697-37-2	31.5%	No information available	1 ppm / 2.8 mg/m ³

8.2 Exposure controls



Gloves



Goggles



Suit



Respirator

Engineering controls should be provided which maintain airborne concentrations as low as practicable. In case of insufficient ventilation, wear suitable respiratory equipment. Wear PVC gloves. Wear goggles giving complete eye protection. Wear suitable protective clothing.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state:	liquid
Colour:	colourless to yellow
Odour:	None
Melting point/Range:	~0 °C at 760 mm /Hg
Boiling Point/Range:	~100 °C at 760 mm /Hg
Flammability:	Non-flammable
Explosive Properties:	Non-explosive
Flashpoint:	>93°C
Autoflammability:	not applicable
Decomposition temperature:	No information available

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SECTION 9: Physical and chemical properties

pH:	1 at 20 °C
Kinematic viscosity:	Not applicable
Solubility in water:	Miscible with water
Partition Coefficient (n-Octanol/Water):	Log Pow - not known
Vapour Pressure:	No information available
Density:	1.1802 - 1.2107 g/cm ³ at 20 °C
Relative vapour density:	No information available
Particle characteristics:	Not applicable
Oxidising Properties:	May accelerate combustion

9.2 Other information

No information available.

SECTION 10: Stability and reactivity

10.1 Reactivity

No information available.

10.2 Chemical stability

Considered stable under normal conditions.

10.3 Possibility of hazardous reactions

No hazardous reactions known if used for its intended purpose.

10.4 Conditions to avoid

No special precautions are required for this product.

10.5 Incompatible materials

Incompatible with alkalis (strong bases). Incompatible with reducing agents. Incompatible with organics. Incompatible with combustible material.

10.6 Hazardous decomposition products

May give off noxious and toxic fumes in a fire. Decomposition products may include nitrogen oxides.

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Estimated LD50 (oral) (ATE) :	>2000 mg/kg
LD50 (dermal) :	>4000 mg/kg
LC50 (inhalation) :	10 mg/l/4hr (gas/vapour)

Skin corrosion/irritation

Causes severe burns.

Serious eye damage/irritation

Causes severe burns. Possible risk of irreversible effects.

Respiratory or skin sensitisation

Not applicable.

Germ cell mutagenicity

No evidence of mutagenic effects.

SECTION 11: Toxicological information

Carcinogenicity

No evidence of carcinogenic effects.

Reproductive toxicity

No evidence of reproductive effects.

STOT (specific target organ toxicity) - single exposure

No information available.

STOT (specific target organ toxicity) - repeated exposure

No information available.

Aspiration hazard

Not applicable.

11.2 Information on other hazards

The ingestion of significant quantities may cause damage to digestive system. The ingestion of significant quantities may cause nausea/vomiting. The product does not contain $\geq 0.1\%$ ingredients with endocrine-disrupting properties, or having ingredients with properties disrupting the functioning of the endocrine system, in the list established in accordance with the criteria set out in Art. 59 sec. 1 of Regulation 2017/2100/EU or Regulation 2018/605/EU.

SECTION 12: Ecological information

12.1 Toxicity

May cause acute effects in the aquatic environment.

12.2 Persistence and degradability

No information available.

12.3 Bioaccumulative potential

No information available.

12.4 Mobility in soil

miscible with water.

12.5 Results of PBT and vPvB assessment

Not a PBT according to REACH Annex XIII.

12.6 Endocrine disrupting properties

The product does not contain $\geq 0.1\%$ ingredients with endocrine-disrupting properties, or having ingredients with properties disrupting the functioning of the endocrine system, in the list established in accordance with the criteria set out in Art. 59 sec. 1 of Regulation 2017/2100/EU or Regulation 2018/605/EU.

12.7 Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Dilute with a large volume of water. Neutralise with Soda ash before disposal. Wash to waste with plenty of water. Triple rinse drums prior to recycling or disposal.

SECTION 14: Transport information

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SECTION 14: Transport information

- 14.1 UN number or ID number
UN No.: 2031
- 14.2 UN proper shipping name
Proper Shipping Name: Nitric acid
- 14.3 Transport hazard class(es)
Hazard Class: 8
- 14.4 Packing group
Packing Group: II
- 14.5 Environmental hazards
See Section 12.
- 14.6 Special precautions for user
No special precautions are required for this product
- 14.7 Maritime transport in bulk according to IMO instruments
Not applicable

SECTION 15: Regulatory information

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
Water Hazard Class (Company): 1
- 15.2 Chemical safety assessment
A chemical safety assessment is not required under REACH.

SECTION 16: Other information

Text not given with phrase codes where they are used elsewhere in this safety data sheet:-

H272: May intensify fire; oxidiser. EUH071: Corrosive to the respiratory tract.

Other information

This Safety Data Sheet does not constitute a workplace risk assessment. The data given here is based on current knowledge and experience. This Safety Data Sheet describes the product in terms of safety requirements and does not signify any warranty with regard to the product's properties.

This Safety Data Sheet is provided in compliance with regulation EC 1272/2008 as amended by GB-CLP Regulation, UK SI 2019/720 & UK SI 2020/1567.

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