

Vickers Laboratories Ltd - SAFETY DATA SHEET - 0640

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

1.1 Product identifier

Product Name: MANGANESE STANDARD SOLUTION 0.04ppm (40ppb)
Product Part Number: 0640
CAS Number: Not applicable
EC Number: Not applicable
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: Not hazardous

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

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: Not classified

2.2 Label elements

Signal Word: Not applicable

Hazard statements

Not applicable

Precautionary statements

Not applicable

2.3 Other hazards

None.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Manganese Nitrate Tetrahydrate

CAS Number: 20694-39-7

EC Number: 677-704-5

Concentration: =<0.05%

Categories: Ox. Sol. 3 Acute Tox. 4 Skin Corr. 1C STOT RE 2 Aquatic Chronic 3

Nitric Acid [C ≤ 70 %]

CAS Number: 7697-37-2

EC Number: 231-714-2

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SECTION 3: Composition/information on ingredients

Concentration:	=<0.2%
Specific Concentration	Ox. Liq. 3; H272: C ≥ 65 % inhalation: ATE = 2,65 mg/L (vapours)
Limits:	Skin Corr. 1A; H314: C ≥ 20 % Skin Corr. 1B; H314: 5 % ≤ 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 several minutes. If eye irritation persists: Get medical advice/attention.

Contact with skin

Wash affected area with plenty of water.

Inhalation

Remove patient to fresh air.

Ingestion

If swallowed, rinse mouth with water (only if the person is conscious).

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

No hazard expected under normal conditions of use.

5.3 Advice for firefighters

No special precautions are required for this product.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

No special precautions are required for this product.

6.2 Environmental precautions

No special precautions are required for this product.

6.3 Methods and material for containment and cleaning up

To clean the floor and all objects contaminated by this material use water. Wash to waste with plenty of water.

6.4 Reference to other sections

See Section 8.2.

See Section 13.

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SECTION 7: Handling and storage

7.1 Precautions for safe handling

No special precautions are required for this product.

7.2 Conditions for safe storage, including any incompatibilities

Keep in a cool, dry, well ventilated place.

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	=<0.2%	No information available	1 ppm / 2.8 mg/m ³
Manganese nitrate tetrahydrate	20694-39-7	<=0.05%	0.5 mg/m ³	

8.2 Exposure controls



Gloves



Goggles



Suit

No respiratory protection is required. Wear neoprene or nitrile 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
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:	not applicable
Autoflammability:	not applicable
Decomposition temperature:	No information available
pH:	<3 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:	1.000 g/cm ³ at 20 °C
Relative vapour density:	No information available
Particle characteristics:	Not applicable
Oxidising Properties:	None

9.2 Other information

SECTION 9: Physical and chemical properties

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

None.

10.6 Hazardous decomposition products

None.

SECTION 11: Toxicological information

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

Acute toxicity

LD50 (oral) : >2000 mg/kg

LD50 (dermal) : >4000 mg/kg

LC50 (inhalation) : >20 mg/l/4hr (gas/vapour)

Skin corrosion/irritation

Not hazardous.

Serious eye damage/irritation

Not hazardous.

Respiratory or skin sensitisation

Not hazardous.

Germ cell mutagenicity

No evidence of mutagenic effects.

Carcinogenicity

No evidence of carcinogenic effects.

Reproductive toxicity

No evidence of reproductive effects.

STOT (specific target organ toxicity) - single exposure

Not hazardous.

STOT (specific target organ toxicity) - repeated exposure

Not hazardous.

Aspiration hazard

Not hazardous.

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SECTION 11: Toxicological information

11.2 Information on other hazards

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

On available data, substance is not harmful to aquatic life.

Manganese Nitrate Tetrahydrate

IC50 (algae): 12.4 mg/l (72 hr)

EC50 (daphnia): >100 mg/l (48 hr)

LC50 (fish): 61 mg/l (96 hr)

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

No special precautions are required for this product. Wash to waste with plenty of water.

SECTION 14: Transport information

14.1 UN number or ID number

Not classified as hazardous for transport

14.2 UN proper shipping name

None

14.3 Transport hazard class(es)

None

14.4 Packing group

None

14.5 Environmental hazards

See Section 12.

14.6 Special precautions for user

None

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SECTION 14: Transport information

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): Not hazardous

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

Datasheet Number: 3117 - v2.0.0

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Date reviewed