Vickers Laboratories Ltd - Safety Data Sheet 2382

(in accordance with regulation (EU) 2015/830 and regulation (EC) 1272/2008)

Revision: 2.1 Revision date: 16 April 2021
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Section 1. Identification

1.1 Product Identifier 2382

Product Name METHACRYLIC ACID

CAS Number 79-41-4
REACH Registration No A registration number is not available as the substance or its uses are exempt, the annual tonnage does not require a registration or the registration is envisaged for a later date.

Molecular Formula $CH_2:C(CH_3)COOH$ =86.09

1.2 Relevent identified uses of the substance or mixure & uses advised against

Uses of Material Chemical for industrial and laboratory use. Not suitable for domestic use.

1.3 Supplier Vickers Laboratories Ltd

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UNITED KINGDOM

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(Have this document to hand)

Section 2. Hazards Identification

2.1 Classification of the substance or mixture

Classification according to regulation 1272/2008/EC

Skin corrosion/irritation, category 1A	H314: Causes severe skin burns and eye damage.
Acute toxicity, category 3 (dermal)	H311: Toxic in contact with skin.
Acute toxicity, category 4 (oral)	H302: Harmful if swallowed.
Acute toxicity, category 4 (inhalation)	H332: Harmful if inhaled.
Spec target organ tox - single, category 3	H335: May cause respiratory irritation.

2.2 Label elements

Labelling according to regulation 1272/2008/EC

Signal word Danger

Hazard Pictograms

Hazard Statements	Harmful if swallowed. Toxic in contact with skin. Harmful if inhaled. Causes severe skin burns and eye damage. May cause respiratory irritation.
Precautionary Statements	Wear protective gloves / protective clothing / eye protection. Do not breathe fume/vapours. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do and continue rinsing. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

Section 3. Composition

3.1 Substances

Component	CAS No.	EEC No.	REACH No.	Conc w/w	CLP Classification (1272/2008/CE)
Methacrylic acid	79-41-4	201-204-4		>99%	Skin Corr. 1A,Acute Tox. 3 (D),Acute Tox. 4 (O),Acute Tox. 4 (I),STOT SE 3 (I)

Section 4. First Aid

4.1 Description of first aid measures

Eyes	Irrigate thoroughly with plenty of water for at least 10 minutes, holding the eye open. OBTAIN MEDICAL ATTENTION URGENTLY.
Skin	Wash off skin thoroughly with water. Remove contaminated clothing immediately and wash before re-use. OBTAIN MEDICAL ATTENTION URGENTLY.
Inhalation	Remove from exposure. Keep warm and at rest. If there is difficulty in breathing give oxygen if available. If breathing stops or shows signs of failing, apply artificial resuscitation. If unconscious place in the recovery position. OBTAIN MEDICAL ATTENTION URGENTLY.
Ingestion	If conscious give plenty of water to drink. Do not induce vomiting. If there is difficulty in breathing give oxygen if available. If breathing stops or shows signs of failing, apply artificial resuscitation. If unconscious place in the recovery position. OBTAIN MEDICAL ATTENTION URGENTLY.
Personal protection for first aiders	Wear protective gloves / eye protection.

4.2 Most important symptoms and effects, both acute & delayed.

No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed.

No further relevant information available.

Section 5. Fire Fighting

5.1 Extinguishing media

Extinguishing Media	Water spray, alcohol resistant foam, dry powder or carbon dioxide. Use water spray to keep fire exposed containers cool.
Unsuitable Media	Do not use water jet.

5.2 Special hazards arising from the substance or mixture

Hazards	Vapour-air mixtures are explosive.

5.3 Advice for firefighters

Advice for firefighters	Evacuate area immediately. Keep up wind. Avoid exposure to toxic vapours and fumes. Fire-fighters should wear protective clothing and breathing apparatus.

Section 6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal Protection	Ensure no sources of ignition. Avoid breathing vapour. Use approved personal protective equipment. Evacuate area immediately. Do not allow general use of area until it is safe to do so.

6.2 Environmental precautions

Enviromental	Keep material out of sewers, storm drains, surface waters and soil. Notify the Environmental Agency and local Environmental Health Officer if major spillage occurs.

6.3 Methods and material for containment and cleaning up

Major Spillage	Contain and absorb on inert material. Transfer absorbent to salvage container for removal. Wash area down with copious amounts of water.
Minor Spillage	Contain and absorb on inert material. Transfer absorbent to container for removal. Allow solvent to evaporate in remote area, then dispose of absorbent as solid chemical waste. Wash area down with copious amounts of water.

6.4 Reference to other sections

See section 8.2 for information on protective equipment and section 13 for information on disposal.

Section 7. Storage & Handling

7.1 Precautions for safe handling

All transfer systems should be earthed to prevent accumulation of static electricity. Avoid contact with skin and eyes. Do not breath vapours. Do not allow to contaminate clothing.

Ensure Local Exhaust Ventilation maintains vapour concentrations below the recommended limits.

7.2 Conditions for safe storage, including any incompatibilities

Well ventilated, cool, dry storage . Protect from direct sun and store away from sources of ignition. Keep containers closed when not in use. Keep well separated from oxidising agents and peroxides.

7.3 Specific end use(s)

See section 1.2.

Section 8. Workplace Exposure & Personal Protection

8.1 Control parameters

Component	CAS No	Concentration	Workplace Exposure Limits			
			Long Term (8hr TWA)		Short Term 15min period)	
Methacrylic acid	79-41-4	>99%	20.0 ppm	40.0 mg/m-3	72.0 ppm	143.0 mg/m-3

Exposure data source(s) IOELV: Indicative Occupational Exposure Limit Value.

8.2 Exposure controls

Respiratory Protection	Use L.E.V. or natural ventilation to maintain vapour concentrations below exposure limits. If not, use a well maintained chemical cartridge organic vapour respirator, or use self contained breathing apparatus.
Hand Protection	Use solvent resistant gloves.
Eye Protection	Use tightly fitting chemical splash proof glasses or goggles.
Skin Protection	Avoid contact with skin. If skin contact or contamination of clothing is likely, protective clothing must be worn.
Special Hazards	No special precautions required.

Section 9. Physical & Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance	Clear colourless to pale coloured liquid or frozen mass.
Odour	Characteristic acrylic odour.
pH	1 @ 20°C
Boiling Point	162 °C

Melting Point	15.4 °C
Flash Point	67 °C (Closed cup)
Upper Flammable Limit	8.7%
Lower Flammable Limit	1.6%
Auto Ignition	400 °C
Explosive Properties	Has a tendency to polymerise and this may become explosive.
Oxidising Properties	No.
Vapour Pressure	0.97 hPa @ 20 °C
Relative Density	1.0150
Water Solubility	98 g/L

9.2 Other information

No data available.

Section 10. Stability & Reactivity

10.1	Reactivity	No data available.
10.2	Chemical Stability	Stable under normal conditions but can polymerise if heated.
10.3	Possibility of hazardous reactions	No data available.
10.4	Conditions to Avoid	Heat and polymerisation initiators.
10.5	Incompatable Materials	May polymerise by heat, light, peroxides, activators and initiators with severe heat build up. Acids.
10.6	Hazardous Decomposition Products	None unusual. Burning will produce smoke, carbon monoxide and/or carbon dioxide.

Section 11. Toxicological Information

11.1 Information on toxicological effects

Eyes	The vapour is irritating to the eyes. The liquid and solutions will cause burns. Damage can range from severe irritation and corneal scarring to permanent blindness.
Skin	The liquid and solutions are strong skin irritants and can cause moderate to severe burns. May be absorbed through the skin.
LD50 Skin	500 - 1000 mg/Kg Rabbit
Ingestion	Causes severe corrosion of the mouth, throat and gastro-intestinal tract. Harmful if swallowed.
LD50 Oral	1320 mg/Kg Rat
Inhalation	Exposure to vapour concentrations above the occupational exposure limits will produce severe irritation of the eyes, nose, throat and respiratory tract.
LD50 Inhalation	7.1 mg/L Rat
TCLo	Not available
Carcinogenicity	It is suspected as a long term carcinogen in man but evidence is inconclusive.
Mutagenicity	May be a mutagen.
Reproductive Effects	No information is available.

Section 12. Ecological

12.1	Toxicity	Readily bio-degraded in the environment. Does not bioaccumulate. Practically non toxic to: fish LC50- >100mg/l, daphnia EC50 >100mg/l.
	LC50 Algal	20 mg/L Algae (72 hours)
	LC50 Crustacea	>130 mg/L Daphnia magna (48 hours)
	LC50 Fish	85 mg/L Fish (96 hours)
12.2	Persistence and degradability	No data available.
12.3	Bioaccumulative potential	No data available.
12.4	Mobility in soil	No data available.

12.5	Results of PBT & vPvB assessment	Assessment not required.
12.6	Other adverse effects	None known at present.

Section 13. Disposal Considerations

13.1 Waste treatment methods

Disposal Methods	Dispose of in a licensed incinerator for organic solvents. Do not dispose of as domestic waste.
Contaminated Packaging	Use a licensed waste disposer. Do not attempt to burn any residual liquids due to risk of explosion.

Section 14. Transport Information

14.1	**UN Number**	2531
14.2	**Proper Shipping Name**	Methacrylic acid
14.3	**Transport classes**	
	UN classification	8
	Subsidiary hazard(s)	None
	Transport category	2
	ADR Hazard ID	89
	Tunnel Restriction Code	E
14.4	**Packing Group**	II
14.5	**Environment hazards**	See section 12.
14.6	**Special precautions for user**	No special precautions required.
14.7	**Transport in bulk**	Not transported in bulk.

Section 15. Regulatory Information

15.1 Safety, health and environment regulations specific for subtance/mixture.

Classification, Labeling & Packaging of Substances & Mixtures Regulations (1272/2008/CE)

Classification	Skin corrosion/irritation, category 1A; Acute toxicity, category 3 (dermal); Acute toxicity, category 4 (oral); Acute toxicity, category 4 (inhalation); Spec target organ tox - single, category 3
Signal word	Danger
Hazard Pictograms	
Hazard Statements	H302, H311, H332, H314, H335 Harmful if swallowed. Toxic in contact with skin. Harmful if inhaled. Causes severe skin burns and eye damage. May cause respiratory irritation.
Precautionary Statements	P280, P260, P303+P361+P353, P304+P340, P305+P351+P338, P301+P330+P331 Wear protective gloves / protective clothing / eye protection. Do not breathe fume/vapours. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do and continue rinsing. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

15.2 Chemical safety assessment

Assessment not required.

Section 16. Other Information

The information contained in this document only covers the hazards presented by this material, it DOES NOT constitute a workplace risk assessment. See sections 11 for toxicological information and section 12 for ecological information.

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