

Revision: 2.1

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Section 1. Identification

1.1 Product Identifier 1841

Product Name MALONIC ACID pure

CAS Number 141-82-2

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 $\text{CH}_2(\text{COOH})_2 = 104.06$

1.2 Relevant identified uses of the substance or mixture & 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

Phone 44 0113 2362811
Fax +44(0)113 2362703
Email safety@viclabs.co.uk
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1.4 Emergency Telephone (08:00-16:30) +44(0) 113 2362811 (24hr) 112 (Have this document to hand)

Section 2. Hazards Identification

2.1 Classification of the substance or mixture

Classification according to regulation 1272/2008/EC

Serious eye damage/irritation, category 1

H318: Causes serious eye damage.

2.2 Label elements

Labelling according to regulation 1272/2008/EC

Signal word Danger

Hazard Pictograms



Hazard Statements Causes serious eye damage.

Precautionary Statements Avoid breathing dust / fume / gas / mist / vapours / spray. Wear protective gloves / protective clothing / eye protection / face protection. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do and continue rinsing. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Store locked up.

Section 3. Composition

3.1 Substances

Component	CAS No.	EEC No.	REACH No.	Conc w/w	CLP Classification (1272/2008/CE)
Malonic Acid	141-82-2	205-503-0		<98%	Eye Dam. 1

Section 4. First Aid

4.1 Description of first aid measures

Eyes	Irrigate thoroughly with plenty of water until MEDICAL ATTENTION has been obtained.
Skin	Thoroughly wash off skin with soap and water.
Inhalation	Remove from exposure. If breathing stops or shows signs of failing, apply artificial resuscitation. If breathing is difficult, give oxygen. OBTAIN MEDICAL ATTENTION.
Ingestion	Wash out the patients mouth thoroughly with water. 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, foam, dry powder or carbon dioxide.
Unsuitable Media	Nothing specified.

5.2 Special hazards arising from the substance or mixture

Hazards	Can form explosive dust clouds.
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5.3 Advice for firefighters

Advice for firefighters	Consider all other materials in the vicinity.
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Section 6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal Protection	Wear goggles, respirator, rubber boots and heavy rubber gloves.
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6.2 Environmental precautions

Environmental	Keep material out of sewers, storm drains, surface waters and soil. Notify the Environmental Agency and local Environmental Health Officer if major spillage occurs.
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6.3 Methods and material for containment and cleaning up

Major Spillage	Sweep up, place in a bag and hold for waste disposal. Do not create dust. Ventilate area and wash spill site after material pickup is complete.
Minor Spillage	Sweep up, place in a bag and hold for waste disposal. Do not create dust. Ventilate area and wash spill site after material pickup is complete.

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

Avoid creating dust. Wash thoroughly after handling.

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

7.2 Conditions for safe storage, including any incompatibilities

Well ventilated, cool, dry storage .

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
Malonic Acid	141-82-2	<98%	-	-

Exposure data source(s) No occupational exposure data currently available.

8.2 Exposure controls

Respiratory Protection Wear NIOSH/MSHA-approved respirator.

Hand Protection Wear rubber 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	White crystalline powder.
Odour	No specific odour.
pH	Not applicable
Boiling Point	>140 °C
Melting Point	135 °C
Flash Point	157 °C (Closed cup)
Upper Flammable Limit	Not applicable
Lower Flammable Limit	Not applicable
Auto Ignition	580 °C
Explosive Properties	Can form explosive dust clouds.
Oxidising Properties	No.
Vapour Pressure	Not applicable
Relative Density	1.030
Water Solubility	766 g/L Not specified.

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

10.3	Possibility of hazardous reactions	No data available.
10.4	Conditions to Avoid	Protect from moisture.
10.5	Incompatible Materials	Strong oxidising agents. Alkalies.
10.6	Hazardous Decomposition Products	In combustion emits carbon dioxide & carbon monoxide.

Section 11. Toxicological Information

11.1 Information on toxicological effects

Eyes	Causes serious eye damage.
LD50 Skin	Not available
LD50 Oral	1500 mg/Kg Rat
Inhalation	Inhalation of dust may produce irritation of the eyes and respiratory tract. The powder may be harmful.
LD50 Inhalation	Not available
TCLo	Not available
Carcinogenicity	Not considered to be a carcinogen.
Mutagenicity	Not considered to be a mutagen.
Reproductive Effects	None identified.
Other Information	Symptoms of exposure may include burning sensation, coughing, wheezing, shortness of breath,

Section 12. Ecological

12.1	Toxicity	Not biodegradable : highly water contaminating. Known to be toxic to aquatic organisms : no data available.
	LC50 Algal	Not available
	LC50 Crustacea	Not available
	LC50 Fish	Not available
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	Dissolve or mix the material with a combustible solvent. Burn in a chemical incinerator equipped with afterburners and scrubbers.
Contaminated Packaging	Dissolve or mix the material with a combustible solvent. Burn in a chemical incinerator equipped with afterburners and scrubbers.

Section 14. Transport Information

14.1 UN Number	Non-restricted
14.2 Proper Shipping Name	Non-restricted
14.3 Transport classes	
UN classification	None
Subsidiary hazard(s)	None
Transport category	None
ADR Hazard ID	Non-restricted
Tunnel Restriction Code	Non-restricted
14.4 Packing Group	None
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 substance/mixture.

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

Classification Serious eye damage/irritation, category 1

Signal word Danger

Hazard Pictograms



Hazard Statements H318
Causes serious eye damage.

Precautionary Statements P261, P280, P305+P351+P338, P304+P340, P405
Avoid breathing dust / fume / gas / mist / vapours / spray. Wear protective gloves / protective clothing / eye protection / face protection. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do and continue rinsing. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Store locked up.

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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