



SAFETY DATA SHEET according to Regulation (EU) 2015/830

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Oxalic Acid

Revision 11
Revision date 2019-02-15

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

1.1. Product identifier

Product name	Oxalic Acid
REACH Registration Number	01-2119534576-33
CAS No.	6153-56-6
EC No.	205-634-3
Product code	SHP 117

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

Product Use	[SU22] Professional uses: Public domain (administration, education, entertainment, services, craftsmen);
Description	A complete list of uses are provided in the annex to this SDS. Industrial uses of aqueous solutions of Oxalic Acid. Industrial uses of Oxalic Acid. Professional uses of aqueous solutions of Oxalic Acid. Professional uses of solid oxalic acid. Consumer use of formulation containing Oxalic Acid.

1.3. Details of the supplier of the safety data sheet

Company	Superfine Manufacturing Ltd
Address	Orchardbank Industrial Estate Forfar Angus Scotland DD8 1TD
Web	www.superfine.co.uk
Telephone	Tel: 01307 463538
Fax	Fax: 01307 468505
Email	nigel@superfine.co.uk
Email address of the competent person	nigel@superfine.co.uk

1.4. Emergency telephone number

Emergency telephone number	01307 463538 8.30am to 17.00pm
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SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

2.1.2. Classification - EC 1272/2008	Acute Tox. 4: H302+H312; Eye Dam. 1: H318;
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2.2. Label elements

Hazard pictograms	
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2.2. Label elements

Signal Word	Danger
Hazard Statement	Acute Tox. 4: H302+H312 - Harmful if swallowed or in contact with skin. Eye Dam. 1: H318 - Causes serious eye damage.
Precautionary Statement: Prevention	P270 - Do not eat, drink or smoke when using this product. P280 - Wear protective gloves/protective clothing/eye protection/face protection.
Precautionary Statement: Response	P301+P312 - IF SWALLOWED: Call a POISON CENTER/doctor/ if you feel unwell. P302+P352 - IF ON SKIN: Wash with plenty of water/ . P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P330 - Rinse mouth.
Precautionary Statement: Disposal	P501 - Dispose of contents/container to an approved disposal site, in accordance with local regulations.

2.3. Other hazards

Other hazards	PBT not identified as a PBT substance.
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SECTION 3: Composition/information on ingredients

3.1. Substances

EC 1272/2008

Chemical Name	Index No.	CAS No.	EC No.	REACH Registration Number	Conc. (%w/w)	Classification
Oxalic Acid (Oxalic acid)		6153-56-6	205-634-3	01-2119534576-33	90 - 100%	Acute Tox. 4: H302+H312; Eye Dam. 1: H318;

Further information

Product Shelf Life	RECOMMENDED SHELF LIFE 1 YEAR FROM DATE OF DELIVERY.
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SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation	Move affected person to fresh air at once. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen.
Eye contact	Rinse with water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes and get medical attention.
Skin contact	Remove contaminated clothing. Wash skin thoroughly with soap and water. Get medical attention promptly if symptoms occur after washing.
Ingestion	Do not induce vomiting. Remove affected person from source of contamination. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Rinse mouth thoroughly with water. Give plenty of water to drink. Get medical attention.

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

Inhalation	Irritation of nose, throat and airway. Coughing. Difficulty in breathing. Headache.
Eye contact	Causes serious eye damage. Redness.
Skin contact	Redness. Pain.
Ingestion	Sore throat. Burning sensation in mouth. Stomach pain. Difficulty in breathing. Paralysis. Convulsions, shock.

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

Inhalation	Move the exposed person to fresh air. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Seek medical attention. Show this safety data sheet to the doctor in attendance.
Eye contact	Rinse immediately with plenty of water for 15 minutes holding the eyelids open. Contact lenses should be removed. Seek medical attention. Show this safety data sheet to the doctor in

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

Skin contact	attendance. Remove contaminated clothing immediately. Rinse immediately with plenty of water. Seek medical attention. Show this safety data sheet to the doctor in attendance.
Ingestion	Drink 1 to 2 glasses of water. Seek medical attention. Show this safety data sheet to the doctor in attendance.

General information

	If you feel unwell, seek medical advice (show the label where possible). Treat symptomatically. Never give anything by mouth to an unconscious person.
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SECTION 5: Firefighting measures

5.1. Extinguishing media

	This product is not flammable . Use fire-extinguishing media appropriate for surrounding materials.
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5.2. Special hazards arising from the substance or mixture

	On contact with hot surfaces or flames this substance decomposes forming formic acid (HCO ₂ H) and carbon monoxide (CO).
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5.3. Advice for firefighters

	Cool containers exposed to flames with water until well after the fire is out. Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing., Firefighter's clothing conforming to European standard EN469 (including helmets, protective boots and gloves) will provide a basic level of protection for chemical incidents.
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Further information

	In the event of a fire and/or explosion do not breath fumes. Standard procedure for chemical fires. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

	Avoid generation and spreading of dust. Avoid inhalation of dust. Provide adequate ventilation., Avoid contact with skin and eyes. Wear protective clothing as described in Section 8 of this safety data sheet. Keep unnecessary and unprotected personnel away from the spillage.
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6.2. Environmental precautions

	Do not discharge into drains or watercourses or onto the ground. Keep spilled material dry if possible.
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6.3. Methods and material for containment and cleaning up

	Collect powder using special dust vacuum cleaner with particle filter or carefully sweep into suitable waste disposal containers and seal securely. Flush contaminated area with plenty of water. Containers with collected spillage must be properly labelled with correct contents and hazard symbol.
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6.4. Reference to other sections

	Wear protective clothing as described in Section 8 of this safety data sheet. For waste disposal, see Section 13.
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SECTION 7: Handling and storage

7.1. Precautions for safe handling

	Avoid spilling. Avoid contact with skin and eyes. Do not handle broken packages without protective equipment. Do not wear contact lenses. Provide adequate ventilation. Provide adequate general and local exhaust ventilation. For further information, see Exposure Scenario. Do not eat, drink or smoke when using this product. Wash at the end of each work shift and before eating, smoking and using the toilet. Take off contaminated clothing and wash it before reuse. Contaminated work clothing should not be allowed out of the workplace.
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7.2. Conditions for safe storage, including any incompatibilities

Store in tightly-closed, original container in a dry, cool and well-ventilated place. Keep away from food, drink and animal feeding stuffs. Store away from incompatible materials (see Section 10).

7.3. Specific end use(s)

The identified uses for this product are detailed in Section 1.2. For further information, see Exposure Scenario.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure controls.

8.1.1. Exposure Limit Values

Oxalic Acid (Oxalic acid)	WEL 8-hr limit ppm: -	WEL 8-hr limit mg/m ³ : 1
	WEL 15 min limit ppm: -	WEL 15 min limit mg/m ³ : 2
	WEL 8-hr limit mg/m ³ total -	WEL 15 min limit mg/m ³ total -
	inhalable dust:	inhalable dust:
	WEL 8-hr limit mg/m ³ total -	WEL 15 min limit mg/m ³ total -
	respirable dust:	respirable dust:

DNEL: Derived no-effect level.

Exposure Pattern - Workers

Oxalic Acid	Acute dermal - Local effects	0.69 mg/cm ³	Long-term - dermal - Systemic effects	2.29 mg/kg
	Long-term - inhalation - Systemic effects	4.03 mg/m ³		

Exposure Pattern - General population

Oxalic Acid	Acute dermal - Local effects	0.35 mg/m ³	Long-term - oral - Systemic effects	1.14 mg/m ³
	Long-term - dermal - Systemic effects	1.14 mg/kg		

8.2. Exposure controls



Adopt best Manual Handling considerations when handling, carrying and dispensing. Avoid contact with skin and eyes. Handle in accordance with good industrial hygiene and safety practice. Use appropriate personal protective equipment. Wear suitable protective clothing and eye/face protection.

8.2.1. Appropriate engineering controls

Provide adequate ventilation. Observe any occupational exposure limits for the product or ingredients. Provide adequate general and local exhaust ventilation. Provide extract ventilation at the points where emissions occur. For further information, see Exposure Scenario.

Eye / face protection

The following protection should be worn: Dust-resistant, chemical splash goggles. Personal protective equipment for eye and face protection should comply with European Standard EN166.

Skin protection - Handprotection

Wear protective gloves. To protect hands from chemicals, gloves should comply with European Standard EN374. It is recommended that gloves are made of the following material: Neoprene. Nitrile rubber. Rubber (natural, latex). Polyvinyl chloride (PVC)., The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material.

Respiratory protection

If ventilation is inadequate, suitable respiratory protection must be worn., Wear a respirator fitted with the following cartridge: Particulate filter, type P2. Disposable filtering half mask respirators

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8.2. Exposure controls

	should comply with European Standard EN149 or EN405.
8.2.3. Environmental exposure controls	Do not discharge into drains or watercourses or onto the ground. For further information, see Exposure Scenario.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Crystals.
Colour	Colourless/White
Odour	Odourless
Odour threshold	No data available
pH	0.7 @ 50 g/l (diluted solution)
Melting point	101.5 °C
Initial boiling point	165 °C
Flash point	Not applicable.
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Vapour pressure	15.6
Vapour density	No data available
Relative density	1.65 @ 20 degC
Water solubility	108 g/l water @ 25 degC
Partition coefficient	-0.81 log P
Autoignition temperature	> 400 °C
Viscosity	No data available
Explosive properties	No data available
Oxidising properties	No data available
Solubility	Soluble in water

9.2. Other information

Conductivity	No data available
Surface tension	No data available
Bulk Density	750 - 900 kg/m3
Sublimation Point	> 160 °C
Gas group	No data available
Benzene Content	No data available
Lead content	No data available
VOC (Volatile organic compounds)	No data available
Mass number	126.07
Chemical Symbol	H2C2O4.2H2O

SECTION 10: Stability and reactivity

10.1. Reactivity

	Aqueous solutions are acidic. On contact with hot surfaces or flames this substance decomposes forming formic acid (HCO ₂ H) and carbon monoxide (CO).
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10.2. Chemical stability

	Stable at normal ambient temperatures and when used as recommended.
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10.3. Possibility of hazardous reactions

	May attack some plastics, rubber and coatings. Reactions with the following materials may cause explosions: Strong oxidising agents. Some silver compounds to form silver oxalate (silver oxalate is explosive). The following materials may react with the product: Alkalis. Ammonia.
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10.4. Conditions to avoid

Avoid exposure to air. Water, moisture. Avoid heat.

10.5. Incompatible materials

Oxidising materials. Alkalis. Ammonia. Halogenated compounds. Metals. Water.

10.6. Hazardous decomposition products

Carbon dioxide (CO₂). Carbon monoxide (CO). Formic acid (HCO₂H).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity	Acute toxicity - oral. ATE oral (mg/kg) 500.0. Acute toxicity - dermal. Notes (dermal LD50) - OECD 404. ATE dermal (mg/kg) 1,100.0.
Skin corrosion/irritation	based on available data the classification criteria are not met.
Serious eye damage/irritation	data lacking.
Respiratory or skin sensitisation	based on available data the classification criteria are not met.
Germ cell mutagenicity	based on available data the classification criteria are not met.
Carcinogenicity	based on available data the classification criteria are not met.
Reproductive toxicity	based on available data the classification criteria are not met.
STOT-single exposure	based on available data the classification criteria are not met.
STOT-repeated exposure	based on available data the classification criteria are not met.
Aspiration hazard	based on available data the classification criteria are not met.

11.1.2. Mixtures

No data available.

11.1.3. Hazard Information

No data available.

11.1.4. Toxicological Information

Oxalic Acid	Oral Rat LD50: 500.0 mg/kg	Dermal Rabbit LD50: 1100.0 mg/kg
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SECTION 12: Ecological information

12.1. Toxicity

Oxalic Acid	Daphnia EC50/48h: 162.2000 mg/l
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12.2. Persistence and degradability

The substance is readily biodegradable. The product has proven to be degradable under anaerobic conditions.

12.3. Bioaccumulative potential

Bioaccumulation of this product is not expected to occur.

Partition coefficient

Oxalic Acid	-0.81 log P
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12.4. Mobility in soil

The product is soluble in water.
The product is readily biodegradable. (Soil).

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12.5. Results of PBT and vPvB assessment

	This product does not contain any substances classified as PBT or vPvB.
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12.6. Other adverse effects

	The product may affect the acidity (pH) of water which may have hazardous effects on aquatic organisms.
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SECTION 13: Disposal considerations**13.1. Waste treatment methods**

	Dispose of waste and residues in accordance with local authority requirements.
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General information

	Dispose of in compliance with all local and national requirements.
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Disposal of packaging

	Do NOT reuse empty containers. Empty containers can be sent to landfill after cleaning, if in compliance with local and national regulations.
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SECTION 14: Transport information**14.1. UN number**

	The product is not classified as dangerous for carriage.
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14.2. UN proper shipping name

	The product is not classified as dangerous for carriage.
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14.3. Transport hazard class(es)

	The product is not classified as dangerous for carriage.
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14.4. Packing group

	The product is not classified as dangerous for carriage.
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14.5. Environmental hazards

	The product is not classified as dangerous for carriage.
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14.6. Special precautions for user

	The product is not classified as dangerous for carriage.
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14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

	The product is not classified as dangerous for carriage.
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SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****Regulations**

	REGULATION (EC) No 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC.
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	COMMISSION REGULATION (EU) No 453/2010 of 20 May 2010 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC.
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15.2. Chemical safety assessment

	No information available.
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SECTION 16: Other information**Other information**

Revision	This document differs from the previous version in the following areas: 2 - 2.1.2. Classification - EC 1272/2008. 2 - Hazard pictograms. 2 - Signal Word. 2 - Precautionary Statement: Prevention. 2 - Precautionary Statement: Response. 2 - Precautionary Statement: Disposal. 2 - SUPPLEMENTAL HAZARD INFORMATION.
Text of Hazard Statements in Section 3	Acute Tox. 4: H302+H312 - Harmful if swallowed or in contact with skin Eye Dam. 1: H318 - Causes serious eye damage.

Further information

	The information supplied in this Safety Data Sheet is designed only as guidance for the safe use, storage and handling of the product. This information is correct to the best of our knowledge and belief at the date of publication however no guarantee is made to its accuracy. This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any other process.
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