



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

> Page 1/8

14 ion ate 2020-10-23

	Page 1
	Oxalic Acid
	Revision
	Revision date 2020-10-2
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	e 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	nigel@superfine.co.uk
competent person	
1.4. Emergency telephone numl	ber
Emergency telephone number	01307 463538
	8.30am to 17.00pm
	National Poisons Information Service: For medical advice or information you should contact your GP or NHS 111 (or NHS 24 in Scotland) on 111 (for 24 hour health advice)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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



If you are a healthcare professional with an enquiry please visit www.TOXBASE.org

Revision 14 Revision date 2020-10-23

2.2. Label elements	
Hazard pictograms	
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	P280 - Wear protective gloves/protective clothing/eye protection/face protection.
Precautionary Statement: Response	P301+P310+P330+P331 - IF SWALLOWED: Immediately call a POISON CENTER/doctor. Rinse mouth. Do NOT induce vomiting. 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.
Precautionary Statement: Disposal	P501 - Dispose of contents/container to an approved disposal site, in accordance with local regulations.
2.3. Other hazards	
Other hazards	This mixture is not classified as PBT or vPvB according to current ELL criteria

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.

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



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 attendance Skin contact 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. SECTION 5: Firefighting measures 5.1. Extinguishing media This product is not flammable. Use fire-extinguishing media appropriate for surrounding materials. 5.2. Special hazards arising from the substance or mixture On contact with hot surfaces or flames this substance decomposes forming formic acid (HCO2H) and carbon monoxide (CO). 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. 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 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. 6.2. Environmental precautions Do not discharge into drains or watercourses or onto the ground. Keep spilled material dry if possible. 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. 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 SECTION 7: Handling and storage

7.1. Precautions for safe handling



Oxalic Acid

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.		

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/m3: 1
	WEL 15 min limit ppm: -	WEL 15 min limit mg/m3: 2
	WEL 8-hr limit mg/m3 total -	WEL 15 min limit mg/m3 total -
	inhalable dust:	inhalable dust:
	WEL 8-hr limit mg/m3 total -	WEL 15 min limit mg/m3 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 - inhalation - Systemic 4.03 mg/m ³	Long-term - dermal - Systemic 2.29 mg/kg
	effects	effects

Exposure Pattern - General population

Oxalic Acid	Acute dermal - Local effects 0.35 mg/m³	
	Long-term - dermal - Systemic 1.14 mg/kg effects	Long-term - oral - Systemic effects 1.14 mg/m ³

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



Revision 14

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

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Crystals /Powder
Appearance Calaura	
Colour	Colouriess/white
Odour	Odourless
Odour threshold	No data available
pН	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	No data available
compounds)	
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 (HCO2H) and carbon monoxide (CO).



Oxalic Acid

Revision 14 Revision date 2020-10-23

Stable at normal ambient temperatures and when used as recommended. 10.3. Possibility of hazardous reactions May attack some plastics, rubber and coalings. 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 cause explosions: Strong oxidising agents. Some silver compounds to form silver oxalate (silver oxalate is explosive). The following materials. Alkalis. Ammonia. 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: Toxoloological effects Acute toxicity - oral. Acute toxicity - dermal. Notes (dermal LOSQ) - OECD 404. ATE dermal (mg/kg) 1100.0. Based on available data the classification criteria are not met. data tacking. Serious eye damage/interion based on available data the classification criteria are not met. data tacking. Stroo-single exposure based on available data the classification criteria are not met. based on available data the classification criteria are not met. Storo-single exposure based on available data the classification criteria are not met. based on available data the classification criteria are not met. Storo-single exposure based on available data the classification criteria are not met. based on ava	10.2. Chemical stability	
10.3. Possibility of hazardous reactions May attack some plastics, rubber and costings. 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. 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. Acute toxicity - based on available data the classification criteri		Stable at normal ambient temperatures and when used as recommended.
May attack some plastics, rubber and coatings. Reactions with the following materials may cause explosions: Strong oxidising agents. Some silver compounds to form silver oxialite is explosive). The following materials may react with the product. Alkalis. Ammonia. 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. 10.8. Hazardous decomposition products Carbon dioxide (CO2). Carbon monoxide (CO). Formic acid (HCO2H). SECTION 11: Toxicological information Carbon dioxide (CO2). Carbon monoxide (CO). Formic acid (HCO2H). SECTION 11: Toxicological information The oral (mg/kg) 500.0. Acute toxicity Acute toxicity - oral. ATE oral (mg/kg) 1,100.0. Dased on available data the classification criteria are not met. Dased on available data the classification criteria are not met. Seforus eye damage/inflation based on available data the classification criteria are not met. Based on available data the classification criteria are not met. Dased on available data the classification criteria are not met. StoTo-single exposure based on available data the classification criteria are not met. Based on available data the classification criteria are not met. Dased on available data the classification criteria are not met. StoTo-single exposure based on available data the classification criteria are not met. </th <th>10.3. Possibility of hazardous re</th> <th>actions</th>	10.3. Possibility of hazardous re	actions
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 LDSO) - OECD 404. ATE dermal (mg/kg) 1100.0. Acute toxicity - dermal. Notes (dermal LDSO) - OECD 404. ATE dermal (mg/kg) 1100.0. 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. Gern cell mutagenicity based on available data the classification criteria are not met. StoT-single exposure based on available data the classification criteria are not met. StoT-single exposure based on available data the classification criteria are not met. StoT-single exposure based on available data the classification criteria are not met. StoT-single exposure based on available data the classification criteria are not met. 11.1.2. Mixtures baser		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.
Avoid exposure to air. Water, moisture. Avoid heat. 10.5. Incompatible materials 0xidising 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. A TE crait (mg/kg) 500.0. Acute toxicity - demail. Notes (dermal LDS0) - OECD 404. ATE demail (mg/kg) 1100.0. Skin corrosion/Irritation based on available data the classification criteria are not met. Serious eye damage/irritation based on available data the classification criteria are not met. Germ cell mutagenicity based on available data the classification criteria are not met. StoTo-respeted exposure based on available data the classification criteria are not met. StoTo-respeted exposure based on available data the classification criteria are not met. StoTo-respeted exposure based on available data the classification criteria are not met. StoTo-respeted exposure based on available data the classification criteria are not met. StoTo-respeted exposure based on available data the classification criteria are not met. 11.1.2. Matures Internation Intra. Toxicological information I	10.4. Conditions to avoid	
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 Section 11: Toxicological information 11.1. Information on toxicological effects Acute toxicity oral. Acute toxicity Acute toxicity - oral. Acute toxicity dermal. Notes (dermal LDS0) - OECD 404. ATE dermal (mg/kg) 1:00.0. based on available data the classification criteria are not met. Serious eye damage/irritation Based on available data the classification criteria are not met. Germ cell mutagenicity based on available data the classification criteria are not met. Based on available data the classification criteria are not met. Stort-single exposure based on available data the classification criteria are not met. Based on available data the classification criteria are not met. Stort-single exposure based on available data the classification criteria are not met. Based on available data the classification criteria are not met. Stort-single exposure based on available data the classification criteria are not met. Based on available data the classification criteria are not met. Stort-single exposure based on available data the classification criteria are not met. Based on available data the classification criteria are not met. 11.1.2. Mixtures Intermediation Intermediation 11.2. Add <t< th=""><th></th><th>Avoid exposure to air. Water, moisture. Avoid heat.</th></t<>		Avoid exposure to air. Water, moisture. Avoid heat.
Oxidising materials. Alkatis. 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. Acute toxicity - dermal. Notes (dermal. LDS0) - OECD 404. ATE dermal (mg/kg) 1000. based on available data the classification criteria are not met. Skin corroston/irritation based on available data the classification criteria are not met. Germ cell mutagenicity based on available data the classification criteria are not met. Carbongenicity based on available data the classification criteria are not met. StOT-single exposure based on available data the classification criteria are not met. StOT-single exposure based on available data the classification criteria are not met. StOT-single exposure based on available data the classification criteria are not met. StOT-single exposure based on available data the classification criteria are not met. 11.1.2. Mixtures based on available data the classification criteria are not met. 11.1.3. Hazard Information No data available. 11.1.1.3. Hazard Information Information 12.1. Toxiclogical Information	10.5. Incompatible materials	
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) 1.000. Skin corrosion/inflation based on available data the classification criteria are not met. Serious eye damage/inflation based on available data the classification criteria are not met. Serious reskin based on available data the classification criteria are not met. Germ cell mutagenicity based on available data the classification criteria are not met. Reproductive toxicity based on available data the classification criteria are not met. StorT-repeated exposure based on available data the classification criteria are not met. StorT-repeated exposure based on available data the classification criteria are not met. StorT-repeated exposure based on available data the classification criteria are not met. StorT-repeated exposure based on available data the classification criteria are not met. 11.12. Mixtures based on available. 11.13. Hazard Information No data available. 11.14. Toxicological information No data available.		Oxidising materials. Alkalis. Ammonia. Halogenated compounds. Metals. Water.
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) 100.0. Skin corrosion/Inflation based on available data the classification criteria are not met. Germ cell mutagenicity based on available data the classification criteria are not met. Garcinogenicity based on available data the classification criteria are not met. Carcinogenicity based on available data the classification criteria are not met. StorT-single exposure based on available data the classification criteria are not met. StorT-single exposure based on available data the classification criteria are not met. StorT-single exposure based on available data the classification criteria are not met. StorT-single exposure based on available data the classification criteria are not met. StorT-single exposure based on available. 11.1.2. Mixtures based on available. 11.1.2. Mixtures based on available. 11.1.3. Hazard Information No data available. 11.1.4. Toxicological Information Deremal Rat LD50: 500.0 mg/kg	10.6. Hazardous decomposition	products
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. based on available data the classification criteria are not met. data lacking. based on available data the classification criteria are not met. Serious eye damage/irritation Germ cell mutagenicity based on available data the classification criteria are not met. Desensitisation Germ cell mutagenicity based on available data the classification criteria are not met. Dased on available data the classification criteria are not met. based on available data the classification criteria are not met. StoT-single exposure based on available data the classification criteria are not met. StoT-single exposure based on available data the classification criteria are not met. StoT-single exposure based on available data the classification criteria are not met. 11.1.2. Mixtures No data available. 11.1.2. Mixtures No data available. 11.1.4. Toxicological information No data available. 12.1. Toxicity Deshibit D50: 500.0 mg/kg Dermal Rabbit LD50: 1100.0 mg/kg SECTION 12: Ecological information 122. Persistence and degradablity Desphnia ECS0/48h: 162.2000 mg/l <t< th=""><th></th><th>Carbon dioxide (CO2). Carbon monoxide (CO). Formic acid (HCO2H).</th></t<>		Carbon dioxide (CO2). Carbon monoxide (CO). Formic acid (HCO2H).
11.1. Information on toxicological effects Acute toxicity Acute toxicity - oral. ATE oral (mg/kg) 500.0. Acute toxicity Acute toxicity - oral. Notes (dermal LD50) - OECD 404. ATE dermal (mg/kg) 1,100.0. based on available data the classification criteria are not met. Skin corrosion/irritation Respiratory or skin sensitisation Germ cell mutagenicity based on available data the classification criteria are not met. Carcinogenicity based on available data the classification criteria are not met. Carcinogenicity based on available data the classification criteria are not met. StoT-repeated exposure based on available data the classification criteria are not met. based on available data the classification criteria are not met. StoT-repeated exposure based on available data the classification criteria are not met. stased on available data the classification criteria are not met. 11.1.2. Mixtures 11.1.3. Hazard Information Ixtic Acid Oral Rat LD50: 500.0 mg/kg SECTION 12: Ecological Information 12.1. Toxicity Oxalic Acid Daphnia ECS0/48h: 162.2000	SECTION 11: Toxicological i	information
Acute toxicity Acute toxicity - oral. ATE oral (mg/kg) 50.0. Acute toxicity - demat. Notes (dermal LD50) - OECD 404. ATE demal (mg/kg) 1,100.0. Skin corrosion/imitation based on available data the classification criteria are not met. Germ cell mutagenicity based on available data the classification criteria are not met. Germ cell mutagenicity based on available data the classification criteria are not met. Reproductive toxicity based on available data the classification criteria are not met. Reproductive toxicity based on available data the classification criteria are not met. StoT-repeated 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. 11.1.1.4. Toxicological Information No data available. 0xalic Acid Oral Rat LD50: 500.0 mg/kg Dermal Rabbit LD50: 1100.0 mg/kg SECTION 12: Ecological information Information Information 12.1. Toxicity Dermal Rabbit LD50: 1100.0 mg/kg Information 12.2. Persistence and degradability The substa	11.1. Information on toxicologica	al effects
Skin corrosion/irritation based on available data the classification criteria are not met. Gerin cell mutagenicity based on available data the classification criteria are not met. Gerin 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. 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 Int.a. No data available. 11.1.3. Hazard Information No data available. 11.1.4. Toxicological Information Int.a. Toxicological Information SECTION 12: Ecological Information Intervention 12.1. Toxicity Daphnia EC50/48h: 162.2000 mg/l Caalic Acid Daphnia EC50/48h: 162.2000 mg/l 12.2. Persistence and degradablity biodegradable. The product has proven to be degradable under anareaberic conditions.	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.
Serious eye damage/irritation data lacking. Respiratory or skin 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. 11.1.2. Mixtures Dased on available. 11.1.3. Hazard Information No data available. 11.1.4. Toxicological Information No data available. 0xalic Acid Oral Rat LD50: 500.0 mg/kg Dermal Rabbit LD50: 1100.0 mg/kg SECTION 12: Ecological information Information Information Information 12.1. Toxicity Information Information Information 12.2. Persistence and degradability Information Information Information 12.1. Toxicity Information Information Information Information 12.2. Persistence a	Skin corrosion/irritation	based on available data the classification criteria are not met.
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 Internation 11.1.3. Hazard Information No data available. 11.1.4. Toxicological Information No data available. 0xalic Acid Oral Rat LD50: 500.0 mg/kg Dermal Rabbit LD50: 1100.0 mg/kg SECTION 12: Ecological information Internation Internation 12.1. Toxicity Internation Internation Iza. Persistence and degradability Internation Internation 12.2. Persistence and degradability Internation is readily biodegradable. The product has proven to be degradable under anaerobic conditions. 12.3. Bioaccumulative potential Internatis readily biodegradable. The product has proven to be	Serious eye damage/irritation	data lacking.
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 No data available. Oxalic Acid Oral Rat LD50: 500.0 mg/kg Dermal Rabbit LD50: 1100.0 mg/kg SECTION 12: Ecological information Information Information 12.1. Toxicity Oxalic Acid Daphnia EC50/48h: 162.2000 mg/l 12.2. Persistence and degradability The substance is readily biodegradable. The product has proven to be degradable under anaerobic conditions. 12.3. Bioaccumulative potential The substance is readily biodegradable. The product has proven to be degradable under anaerobic conditions.	Respiratory or skin sensitisation	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 No data available. Oxalic Acid Oral Rat LD50: 500.0 mg/kg Dermal Rabbit LD50: 1100.0 mg/kg SECTION 12: Ecological information Information Information 12.1. Toxicity Daphnia EC50/48h: 162.2000 mg/l Information 12.2. Persistence and degradability The substance is readily biodegradable. The product has proven to be degradable under anaerobic conditions. 12.3. Bioaccumulative potential The substance is readily biodegradable. The product has proven to be degradable under anaerobic conditions.	Germ cell mutagenicity	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 based on available. 11.1.3. Hazard Information No data available. 11.1.4. Toxicological Information No data available. Oxalic Acid Oral Rat LD50: 500.0 mg/kg Dermal Rabbit LD50: 1100.0 mg/kg SECTION 12: Ecological information Information Information 12.1. Toxicity Daphnia EC50/48h: 162.2000 mg/l Information 12.2. Persistence and degradability Information information Information 12.2. Persistence and degradability The substance is readily biodegradable. The product has proven to be degradable under anaerobic conditions. 12.3. Bioaccumulative potential Information Information	Carcinogenicity	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 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 No data available. Oxalic Acid Oral Rat LD50: 500.0 mg/kg Dermal Rabbit LD50: 1100.0 mg/kg SECTION 12: Ecological information 12.1. Toxicity Dxalic Acid Daphnia EC50/48h: 162.2000 mg/l 12.2. Persistence and degradability The substance is readily biodegradable. The product has proven to be degradable under anaerobic conditions. 12.3. Bioaccumulative potential The substance is readily biodegradable. The product has proven to be degradable under anaerobic conditions.	Reproductive toxicity	based on available data the classification criteria are not met.
STOT-repeated exposure Aspiration hazard based on available data the classification criteria are not met. 11.1.2. Mixtures Intervention 11.1.2. Mixtures No data available. 11.1.3. Hazard Information No data available. 11.1.4. Toxicological Information No data available. Oxalic Acid Oral Rat LD50: 500.0 mg/kg Dermal Rabbit LD50: 1100.0 mg/kg SECTION 12: Ecological information 12.1. Toxicity Oxalic Acid Daphnia EC50/48h: 162.2000 mg/l 12.2. Persistence and degradability 12.3. Bioaccumulative potential	STOT-single 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 No data available. Oxalic Acid Oral Rat LD50: 500.0 mg/kg Dermal Rabbit LD50: 1100.0 mg/kg SECTION 12: Ecological information 12.1. Toxicity Oxalic Acid Daphnia EC50/48h: 162.2000 mg/l 12.2. Persistence and degradability The substance is readily biodegradable. The product has proven to be degradable under anaerobic conditions. 12.3. Bioaccumulative potential	STOT-repeated exposure	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 SECTION 12: Ecological information 12.1. Toxicity Oxalic Acid Daphnia EC50/48h: 162.2000 mg/l 12.2. Persistence and degradability 12.3. Bioaccumulative potential	Aspiration hazard	based on available data the classification criteria are not met.
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 SECTION 12: Ecological information 12.1. Toxicity Oxalic Acid Daphnia EC50/48h: 162.2000 mg/l 12.2. Persistence and degradability The substance is readily biodegradable. The product has proven to be degradable under anaerobic conditions. 12.3. Bioaccumulative potential	11.1.2. Mixtures	
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 SECTION 12: Ecological information 12.1. Toxicity Oxalic Acid Daphnia EC50/48h: 162.2000 mg/l 12.2. Persistence and degradability The substance is readily biodegradable. The product has proven to be degradable under anaerobic conditions. 12.3. Bioaccumulative potential		No data available.
No data available. 11.1.4. Toxicological Information Oxalic Acid Oral Rat LD50: 500.0 mg/kg SECTION 12: Ecological information 12.1. Toxicity Oxalic Acid Daphnia EC50/48h: 162.2000 mg/l 12.2. Persistence and degradability The substance is readily biodegradable. The product has proven to be degradable under anaerobic conditions. 12.3. Bioaccumulative potential	11.1.3. Hazard Information	
11.1.4. Toxicological Information Oxalic Acid Oral Rat LD50: 500.0 mg/kg SECTION 12: Ecological information 12.1. Toxicity Oxalic Acid Daphnia EC50/48h: 162.2000 mg/l 12.2. Persistence and degradability The substance is readily biodegradable. The product has proven to be degradable under anaerobic conditions. 12.3. Bioaccumulative potential		No data available.
Oxalic Acid Oral Rat LD50: 500.0 mg/kg Dermal Rabbit LD50: 1100.0 mg/kg SECTION 12: Ecological information 12.1. Toxicity Oxalic Acid Daphnia EC50/48h: 162.2000 mg/l Oxalic Acid Daphnia EC50/48h: 162.2000 mg/l I 2.2. Persistence and degradability The substance is readily biodegradable. The product has proven to be degradable under anaerobic conditions. 12.3. Bioaccumulative potential	11.1.4. Toxicological Information	1
SECTION 12: Ecological information 12.1. Toxicity Oxalic Acid Daphnia EC50/48h: 162.2000 mg/l 12.2. Persistence and degradability The substance is readily biodegradable. The product has proven to be degradable under anaerobic conditions. 12.3. Bioaccumulative potential	Oxalic Acid	Oral Rat LD50: 500.0 mg/kg Dermal Rabbit LD50: 1100.0 mg/kg
12.1. Toxicity Oxalic Acid Daphnia EC50/48h: 162.2000 mg/l 12.2. Persistence and degradability The substance is readily biodegradable. The product has proven to be degradable under anaerobic conditions. 12.3. Bioaccumulative potential	SECTION 12: Ecological information	
Oxalic Acid Daphnia EC50/48h: 162.2000 mg/l 12.2. Persistence and degradability The substance is readily biodegradable. The product has proven to be degradable under anaerobic conditions. 12.3. Bioaccumulative potential	12.1. Toxicity	
12.2. Persistence and degradability 12.2. Persistence and degradability The substance is readily biodegradable. The product has proven to be degradable under anaerobic conditions. 12.3. Bioaccumulative potential	Oxalic Acid	Daphnia EC50/48h: 162.2000 mg/l
The substance is readily biodegradable. The product has proven to be degradable under anaerobic conditions. 12.3. Bioaccumulative potential	12.2. Persistence and degradability	
12.3. Bioaccumulative potential		The substance is readily biodegradable. The product has proven to be degradable under anaerobic conditions.
	12.3. Bioaccumulative potential	



12.3. Bioaccumulative potential	
	Bioaccumulation of this product is not expected to occur.
Partition coefficient	
	Oxalic Acid -0.81 log P
12.4. Mobility in soil	
	The product is soluble in water. The product is readily biodegradable (Soil)
12.5. Results of PBT and vPvB a	assessment
	This product does not contain any substances classified as PBT or vPvB.
12.6. Other adverse effects	
	The product may affect the acidity (pH) of water which may have hazardous effects on aquatic organisms.
SECTION 13: Disposal cons	iderations
13.1. Waste treatment methods	
	Dispose of waste and residues in accordance with local authority requirements.
General information	
	Dispose of in compliance with all local and national requirements.
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.
SECTION 14: Transport info	rmation
14.1. UN number	
	The product is not classified as dangerous for carriage.
14.2. UN proper shipping name	
	The product is not classified as dangerous for carriage.
14.3. Transport hazard class(es)	
	The product is not classified as dangerous for carriage.
14.4. Packing group	
	The product is not classified as dangerous for carriage.
14.5. Environmental hazards	
	The product is not classified as dangerous for carriage.
14.6. Special precautions for use	ər
	The product is not classified as dangerous for carriage.
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.
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,

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

93/105/EC and 2000/21/EC.
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.

15.2. Chemical safety assessment

	No information available.
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.
Text of Hazard Statements in Section 3	2 - Precautionary Statement: Response. Acute Tox. 4: H302+H312 - Harmful if swallowed or in contact with skin Eye Dam. 1: H318 - Causes serious eye damage.
	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.

