

According to REACH Regulations (EC) 1907/2006 and (EU) 2020/878

1. Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product code : GX2309
 Product name : Didecyldimethylammonium chloride, 80% solution
 CAS number : 7173-51-5
 EINECS : 230-525-2
 Physical form : liquid, mixture
 REACH : A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.

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

PC21: Laboratory chemicals.

1.3 Details of the supplier of the safety data sheet

Company name	: Glentham Life Sciences Ltd	Telephone	: +44 (0) 1225 667 798
	Unit 5 Leafield Way	Fax	: +44 (0) 2033 978 909
	Corsham SN13 9SW	Email	: info@glentham.com
	United Kingdom	Web	: www.glentham.com

1.4 Emergency telephone number

Emergency telephone : NHS Direct 111 (UK, 24 hours), 112 (EU, 24 Hours), +44 (0) 1225 667 798 (09.00 – 17.00 GMT) number

2. Hazards identification

2.1 Classification of the substance or mixture

Classification under CLP according to (EC) 1272/2008

H226	Flam. Liq. 3
H301	Acute Tox. 3
H314	Skin Corr. 1B
H318	Eye Dam. 1
H330	Acute Tox. 2
H400	Aquatic Acute 1
H412	Aquatic Chronic 3

2.2 Label elements

Label elements under CLP according to (EC) 1272/2008

Pictograms



GHS02 GHS05 GHS06 GHS09

Signal words

Danger

Hazard statements

H226	Flammable liquid and vapour
H301	Toxic if swallowed
H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage
H330	Fatal if inhaled
H400	Very toxic to aquatic life
H412	Harmful to aquatic life with long lasting effects

Precautionary statements

P260	Do not breathe vapors.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P310	IF SWALLOWED: Immediately call a doctor.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P305+P351+P338

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing.

P310

Immediately call a POISON CENTER or doctor.

2.3 Other hazards

PBT

This substance is not identified as a PBT substance.

3.0 Composition/information on ingredients

3.2 Mixtures

Name	Identifier	%	Classification
Didecyltrimethylammonium chloride	CAS: 7173-51-5 EC: REACH: Not applicable	80	H302, Acute Tox. 4 H314, Skin Corr. 1B
Ethanol	CAS: 64-17-5 EC: 200-578-6 REACH: Not applicable	10	H225, Flam. Liq. 2 H319, Eye Irr. 2A

4. First aid measures

4.1 Description of first aid measures

Skin contact	Consult a doctor. Drench the affected skin with running water for 10 minutes or longer if substance is still on skin. Remove all contaminated clothes and footwear immediately unless stuck to skin. Transfer to hospital if there are burns or symptoms of poisoning.
Eye contact	Consult a doctor. Transfer to hospital for specialist examination. Bathe the eye with running water for 15 minutes.
Ingestion	Consult a doctor. Do not induce vomiting. Give 1 cup of water to drink every 10 minutes. If conscious, give half a litre of water to drink immediately. If unconscious and breathing is OK, place in the recovery position. If unconscious, check for breathing and apply artificial respiration if necessary. Transfer to hospital as soon as possible. Wash out mouth with water.
Inhalation	If breathing becomes bubbly, have the casualty sit and provide oxygen if available. If conscious, ensure the casualty sits or lies down. If unconscious and breathing is OK, place in the recovery position. If unconscious, check for breathing and apply artificial respiration if necessary. Transfer to hospital as soon as possible. Consult a doctor. Remove casualty from exposure ensuring one's own safety whilst doing so.

4.2 Most important symptoms and effects, both acute and delayed

Skin contact	Absorption through the skin may be fatal. Blistering may occur. Irritation or pain may occur at the site of contact. Progressive ulceration will occur if treatment is not immediate. There may be irritation and redness at the site of contact. There may be redness or whiteness of the skin in the area of exposure.
Eye contact	Corneal burns may occur. May cause permanent damage. The eyes may water profusely. There may be irritation and redness. There may be severe pain.
Ingestion	Blood may be vomited. Convulsions may occur. Corrosive burns may appear around the lips. Nausea and stomach pain may occur. There may be bleeding from the mouth or nose. There may be loss of consciousness. There may be soreness and redness of the mouth and throat. There may be vomiting.
Inhalation	Absorption through the lungs can occur causing symptoms similar to those of ingestion. Convulsions may occur. Exposure may cause coughing or wheezing. Nausea and stomach pain may occur. There may be loss of consciousness. There may be shortness of breath with a burning sensation in the throat. There may be vomiting. There may be irritation of the throat with a feeling of tightness in the chest.
Delayed / immediate effects	Convulsions may occur. Immediate effects can be expected after short-term exposure. Nausea and stomach pain may occur. There may be bleeding from the mouth or nose. There may be loss of consciousness.

4.3 Indication of any immediate medical attention and special treatment needed

Immediate / special treatment

Do not induce vomiting. Immediate medical attention is required. Show this safety data sheet to the doctor in attendance. Eye bathing equipment should be available on the premises.

5. Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media for the surrounding fire should be used. Use water spray to cool containers.

5.2 Special hazards arising from the substance or mixture

Exposure hazards

Corrosive. In combustion emits toxic fumes. Toxic.

5.3 Advice for fire-fighters

Wear protective clothing to prevent contact with skin and eyes. Wear self-contained breathing apparatus.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions

Do not attempt to take action without suitable protective clothing - see section 8 of SDS. If outside do not approach from downwind. If outside keep bystanders upwind and away from danger point. Mark out the contaminated area with signs and prevent access to unauthorised personnel. Notify the police and fire brigade immediately. Turn leaking containers leak-side up to prevent the escape of liquid. Refer to section 8 of SDS for personal protection details.

6.2 Environmental precautions

Contain the spillage using bunding. Do not discharge into drains or rivers.

6.3 Methods and material for containment and cleaning up

Clean-up procedures

Clean-up should be dealt with only by qualified personnel familiar with the specific substance. Transfer to a closable, labelled salvage container for disposal by an appropriate method. Absorb into dry earth or sand.

6.4 Reference to other sections

Refer to section 8 of SDS.

7. Handling and storage

7.1 Precautions for safe handling

Handling requirements

Avoid direct contact with the substance. Avoid the formation or spread of dust in the air. Do not handle in a confined space. Ensure there is exhaust ventilation of the area. Ensure there is sufficient ventilation of the area.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Avoid contact with water or humidity. Keep container tightly closed. The floor of the storage room must be impermeable to prevent the escape of liquids. Store in cool, well ventilated area.

7.3 Specific end use(s)

No data available.

8. Exposure controls/personal protection

8.1 Control parameters

Workplace exposure limits

Substance (CAS)	Control Parameter	Value	Notes	Source
Ethanol (64-17-5)	Long-term Exposure Limit (ppm)	1000		UK HSE EH40/2005
	Long-term Exposure Limit (mg m ⁻³)	1920		

8.2 Exposure controls

Engineering measures	Ensure there is exhaust ventilation of the area. The floor of the storage room must be impermeable to prevent the escape of liquids. Ensure there is sufficient ventilation of the area.
Respiratory protection	Respiratory protective device with particle filter. Self-contained breathing apparatus must be available in case of emergency.
Hand protection	Impermeable gloves. Protective gloves (EN 374).
Eye protection	Safety glasses with side-shields. Tightly fitting safety goggles. Ensure eye bath is to hand. Safety glasses (EN 166).
Skin protection	Protective clothing.
Environmental	The floor of the storage room must be impermeable to prevent the escape of liquids.

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	Liquid
Colour	Colourless
Odour	No data available.
Melting point/Freezing point	88 °C
Boiling point/initial boiling point/boiling range	No data available.
Flammability	Flammable liquid and vapour
Lower/Upper explosion limit	No data available.
Flash Point	No data available.
Auto-ignition temperature	350°C
Decomposition temperature	No data available.
pH	No data available.
Kinematic viscosity	No data available.
Solubility	650 mg/L @ 25 °C
Partition coefficient n-octanol/water	No data available.
Vapour pressure	No data available.
Density/relative density	No data available.
Relative vapour pressure	No data available.
Particle characteristics	No data available.

9.2 Other information

No data available.

10. Stability and reactivity

10.1 Reactivity

Stable under recommended transport or storage conditions.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

Hazardous reactions

Decomposition may occur on exposure to conditions or materials listed below. Hazardous reactions will not occur under normal transport or storage conditions.

10.4 Conditions to avoid

Flames. Hot surfaces. Heat.

10.5 Incompatible materials

Materials to avoid

Strong acids. Strong oxidising agents.

11. Toxicological information

11.1 Information on toxicological effects

a) Acute toxicity

Ethanol

10 hr LC50 Rat (Inhalation): 20000 ppm

4 hr LC50 Mouse (Inhalation): 39 g/m3

LD50 Mouse (IP): 0.9 g/L

LD50 Mouse (IV): 2 g/L

LD50 Rat (Oral): 5628 mg/kg

LD50 Mouse (SC): 8.3 g/L

b) Skin corrosion/irritation

Skin corrosion/irritation (Category 1B)

c) Serious eye damage/irritation

Serious eye damage/eye irritation (Category 1)

d) Respiratory or skin sensitisation

No data available.

e) Germ cell mutagenicity

No data available.

f) Carcinogenicity

No data available.

g) Reproductive toxicity

No data available.

h) STOT-single exposure

No data available.

i) STOT-repeated exposure

No data available.

j) Aspiration hazard

No data available.

Symptoms / routes of exposure

Skin contact	Absorption through the skin may be fatal. Blistering may occur. Irritation or pain may occur at the site of contact. Progressive ulceration will occur if treatment is not immediate. There may be irritation and redness at the site of contact. There may be redness or whiteness of the skin in the area of exposure.
Eye contact	Corneal burns may occur. May cause permanent damage. The eyes may water profusely. There may be irritation and redness. There may be severe pain.
Ingestion	Blood may be vomited. Convulsions may occur. Corrosive burns may appear around the lips. Nausea and stomach pain may occur. There may be bleeding from the mouth or nose. There may be loss of consciousness. There may be soreness and redness of the mouth and throat. There may be vomiting.
Inhalation	Absorption through the lungs can occur causing symptoms similar to those of ingestion. Convulsions may occur. Exposure may cause coughing or wheezing. Nausea and stomach pain may occur. There may be loss of consciousness. There may be shortness of breath with a burning sensation in the throat. There may be vomiting. There may be irritation of the throat with a feeling of tightness in the chest.
Delayed / immediate effects	Convulsions may occur. Immediate effects can be expected after short-term exposure. Nausea and stomach pain may occur. There may be bleeding from the mouth or nose. There may be loss of consciousness.
Other information	No data available.

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties

This product does not contain known or suspected endocrine disruptors according to REACH or relevant EU Regulations.

11.2.2 Other information

No additional information

12. Ecological information

12.1 Toxicity

No data available.

12.2 Persistence and degradability

Not biodegradable.

12.3 Bioaccumulative potential

Bioaccumulation potential.

12.4 Mobility in soil

Readily absorbed into soil.

12.5 Results of PBT and vPvB assessment

This substance is not identified as a PBT substance.

12.6 Endocrine disrupting properties

This substance is not identified as having endocrine disrupting properties

12.7 Other adverse effects

No data available.

13. Disposal considerations

13.1 Waste treatment methods

Disposal operations

Transfer to a suitable container and arrange for collection by specialised disposal company.

NB

The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

14. Transport information

ADR	IMDG	IATA	ADN	RID
14.1. UN number				
UN2920	UN2920	UN2920	UN2920	UN2920
14.2. UN proper shipping name				
CORROSIVE LIQUID, FLAMMABLE, N.O.S.	CORROSIVE LIQUID, FLAMMABLE, N.O.S.	Corrosive liquid, flammable, n.o.s.	CORROSIVE LIQUID, FLAMMABLE, N.O.S.	CORROSIVE LIQUID, FLAMMABLE, N.O.S.
Transport document description				
UN2920 CORROSIVE LIQUID, FLAMMABLE, N.O.S. (DIDECYLDIMETHYL AMMONIUM CHLORIDE, 80% SOLUTION), 8 (3), II	UN2920 CORROSIVE LIQUID, FLAMMABLE, N.O.S. (DIDECYLDIMETHYL AMMONIUM CHLORIDE, 80% SOLUTION), 8 (3), II	UN2920 Corrosive liquid, flammable, n.o.s. (Didecyldimeth ylammonium chloride, 80% solution), 8 (3), II	UN2920 CORROSIVE LIQUID, FLAMMABLE, N.O.S. (DIDECYLDIMETHYL AMMONIUM CHLORIDE, 80% SOLUTION), 8 (3), II	UN2920 CORROSIVE LIQUID, FLAMMABLE, N.O.S. (DIDECYLDIMETHYL AMMONIUM CHLORIDE, 80% SOLUTION), 8 (3), II

14.3. Transport hazard class(es)

8 (3)



8 (3)



8 (3)



8 (3)



8 (3)



14.4. Packing group

II

II

II

II

II

14.5. Environmental hazards

No

No

No

No

No

15. Regulatory information

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

This Safety Data Sheet is prepared in accordance with Commission Regulation (EC) 1907/2006, amended by Commission Regulation (EU) 2020/878.

Authorisations/Restrictions

Regulation (EC) 1907/2006, REACH, Annex XIV list of substances subject to authorisation: No data available.

Regulation (EC) 1907/2006, REACH, Annex XVII restrictions on the manufacture, placing on the market and use of certain dangerous substances: No data available.

Regulation (EC) 1005/2009 on substances that deplete the ozone layer: No data available.

Regulation (EC) 850/2004 on persistent organic pollutants, amended by (EU) No 2019/1021: No data available.

15.2 Chemical safety assessment

A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

16. Other information

H-Statement Full Texts

H225 Highly flammable liquid and vapour
H302 Harmful if swallowed
H314 Causes severe skin burns and eye damage
H319 Causes serious eye irritation

Abbreviations Full Texts

ADN European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR European Agreement concerning the International Carriage of Dangerous Goods by Road
ALARP As low as is reasonably practicable
CAS Chemical Abstracts Service
CLP Classification, Labelling and Packaging Regulations
COSHH Control of Substances Hazardous to Health
EC Number European Community Number
EC50 Effective Concentration 50%
EILINCS European List of Notified Chemical Substances
EINECS European Inventory of Existing Commercial Chemical Substances
GHS Globally Harmonised System
HSE Health & Safety Executive UK
IATA International Air Transport Association
IM Intramuscular
IMDG The International Maritime Dangerous Goods Code
IP Intraperitoneal
IV Intravascular
LD50 Lethal Dose 50%
LOEC Lowest Observable Effective Concentration
LTEL Long Term Exposure Limit
NOEC No Observable Effective Concentration
OECD Organisation for Economic Cooperations and Development
PBT Persistent Bioaccumulative Toxic
PPE Personal Protective Equipment

REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Regulations Concerning the International Carriage of Dangerous Goods by Rail
SC	Subcutaneous
SDS	Safety Data Sheet
STEL	Short Term Exposure Limit
STOT	Specific Target Organ Toxicity
VOC	Volatile Organic Compounds
vPvB	Very Persistent and Very Bioaccumulative
WEL	Workplace Exposure Limits

This Safety Data Sheet is prepared in accordance with Commission Regulation (EC) 1907/2006, amended by Commission Regulation (EU) 2020/878.

Disclaimer: Glentham Life Sciences shall not be held liable for any damage resulting from handling or from contact with the above product. The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This document does not guarantee the properties or quality of the product.

Copyright © 2023 Glentham Life Sciences Limited. All rights reserved.