

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Bardac™ 2240

Version 6.2 / EN
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1. Identification of the substance/mixture and of the company/undertaking

Product information

Trade name : Bardac™ 2240
Company : Lonza Ltd
Muenchensteinerstrasse 38
CH-4002 Basel, Switzerland
Telephone: +41 61 316 81 11
Emergency telephone number : Lonza Ltd, CH-4002 Basel, Switzerland
Telephone: +41 61 313 94 94 (24h)
E-mail address : prodinfo@lonza.com
Responsible/issuing person

2. Hazards identification

Classification of the substance or mixture

67/548/EEC / 1999/45/EC

Harmful if swallowed.
Causes burns.
Very toxic to aquatic organisms.

Labelling according to EC Directives

67/548/EEC / 1999/45/EC

Symbol(s)

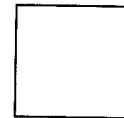
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Corrosive



Dangerous for the environment



R-phrase(s)

R22 : Harmful if swallowed.
R34 : Causes burns.
R50 : Very toxic to aquatic organisms.

S-phrase(s)

S26 : In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S28 : After contact with skin, wash immediately with plenty of water.
S36/37/39 : Wear suitable protective clothing, gloves and eye/face protection.
S45 : In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

- S60 : This material and its container must be disposed of as hazardous waste.
 S61 : Avoid release to the environment. Refer to special instructions/ Safety data sheets.

3. Composition/information on ingredients

Substances / Mixtures : Mixture
 CAS-No. : 7173-51-5
 Index-No. : 612-131-00-6
 EC-No. : 230-525-2

Hazardous components

CAS-No.	EC-No. / Registration number	Classification	Concentration
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Didecyldimethylammonium chloride

7173-51-5	230-525-2	Acute Tox.; 3; H301 Skin Corr.; 1B; H314 Aquatic Acute; 1; H400 C, N; R22, R34, R50	ca. 40 %
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For the full text of the H-Statements mentioned in this Section, see Section 16.
 For the full text of the R-phrases mentioned in this Section, see Section 16.

4. First aid measures

- Inhalation : Move to fresh air. If breathing is irregular or stopped, administer artificial respiration. Give oxygen. First aider needs to protect himself. Call a physician immediately.
- Skin contact : Take off all contaminated clothing immediately. After contact with skin, wash immediately with plenty of soap and water. Call a physician immediately.
- Eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Call a physician immediately.
- Ingestion : Call a physician immediately. Clean mouth with water and drink afterwards plenty of water. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person.

Notes to physician

- Symptoms : Causes severe irritation of eyes, skin and mucous membranes.

5. Fire-fighting measures

- Suitable extinguishing media : Dry powder, Water spray, Foam
- Specific hazards during fire fighting : Heating or fire can release toxic gas.
- Special protective equipment for fire-fighters : In the event of fire, wear self-contained breathing apparatus.
- Further information : Use water spray to cool unopened containers.

6. Accidental release measures

- Personal precautions : Use respirator when performing operations involving potential exposure to vapour of the product.
- Environmental precautions : Do not flush into surface water or sanitary sewer system.
- Methods for cleaning up : Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

7. Handling and storage**Handling**

- Advice on safe handling : Avoid contact with skin and eyes. Provide sufficient air exchange and/or exhaust in work rooms.
- Advice on protection against fire and explosion : Take precautionary measures against static discharges.

Storage

- Requirements for storage areas and containers : To maintain product quality, do not store in heat or direct sunlight. Keep container tightly closed.
- Further information on storage conditions : Do not store below 10°C !

8. Exposure controls/personal protection

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Personal protective equipment

- Respiratory protection : In the case of vapour formation use a respirator with an approved filter.
- : Respirator with a vapour filter (EN 141) Respirator with ABEK filter.
- Hand protection : Suitable material : Nitrile rubber
Break through time : > 480 min
Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact).
- Eye protection : Tightly fitting safety goggles
- : Face-shield
- Skin and body protection : Choose body protection according to the amount and concentration of the dangerous substance at the work place.
Rubber or plastic apron
Rubber or plastic boots
- Hygiene measures : Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes and clothing. Remove and wash contaminated clothing and gloves, including the inside, before re-use.

Environmental exposure controls

- General advice : Do not flush into surface water or sanitary sewer system.

9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance

- Physical state : liquid
- Colour : light yellow
- Odour : aromatic

Safety data

- pH : 6,5 - 8 (10 g/l ; 20,0 °C)
- Stock Point : < 10 °C
- Boiling point/boiling range : ca. 100 °C
- Flash point : > 100 °C
- Density : 0,954 g/cm³ (20 °C)
- Water solubility : completely miscible
- Viscosity, dynamic : 73 mPa.s (23 °C)

10. Stability and reactivity

- Conditions to avoid : no data available
- Hazardous reactions : Stable under normal conditions.

11. Toxicological information

- Skin irritation : Corrosive
Species: rabbit
- Eye irritation : Corrosive
Species: rabbit

The following toxicological data refer to:

- Didecyldimethylammonium chloride** (CAS-No.: 7173-51-5)
- Acute oral toxicity (LD50) : 238 mg/kg
Species: rat
Method: OECD Test Guideline 401
 - Acute dermal toxicity (LD50) : 3 342 mg/kg
Species: rabbit
 - Skin irritation : irritating
Species: rabbit
Exposure time: 3 min
Method: OECD Test Guideline 404
 - Sensitisation : not sensitizing
Species: guinea pig
Buehler Test
Method: US-EPA
 - Genotoxicity in vitro : negative
Ames test, Salmonella typhimurium
Method: OECD 471

negative
Chromosome aberration test in vitro, CHO cells

negative
Gene mutation, CHO cells
 - Genotoxicity in vivo : negative
Chromosome aberration test in vivo
Application Route: Oral
Species: rat
Method: OECD 475

12. Ecological information

The following ecotoxicological data refer to:

Didecyldimethylammonium chloride (CAS-No.: 7173-51-5)

Ecotoxicity effects

Toxicity to fish (LC50)	: 0,19 mg/l Species: Pimephales promelas (fathead minnow) Acute toxicity Exposure time: 96 h Method: US-EPA
Toxicity to fish (NOEC)	: 0,032 mg/l Species: Danio rerio (zebra fish) Chronic toxicity Exposure time: 34 d Method: OECD 210
Toxicity to daphnia (EC50)	: 0,062 mg/l Species: Daphnia magna (Water flea) Immobilization Exposure time: 48 h Method: EPA-FIFRA
Toxicity to daphnia (NOEC)	: 0,010 mg/l Species: Daphnia magna (Water flea) Reproduction Test Exposure time: 21 d Method: OECD 211
Toxicity to algae (ErC50)	: 0,026 mg/l Species: Pseudokirchneriella subcapitata (green algae) Growth inhibition Exposure time: 96 h Method: OECD Test Guideline 201
Toxicity to bacteria (EC50)	: 11 mg/l Species: activated sludge Respiration inhibition Exposure time: 3 h Method: OECD 209
Toxicity to soil dwelling organisms. (NOEC)	: >= 1 000 mg/kg Species: Eisenia fetida (earthworms) Acute toxicity Exposure time: 14 d Method: OECD 207
Toxicity to terrestrial organisms. (EC50)	: 283 - 1 670 mg/kg Exposure time: 14 d Method: OECD 208

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Behaviour in environmental compartments : Mobility in soil
Method: US-EPA

Persistence and degradability

Stability in water : Abiotic degradation hydrolytically stable
Method: EPA-FIFRA

Biodegradability : Modified Sturm Test: 72 %
Readily biodegradable.
Testing period: 28 d
Method: OECD 301 B

Die-Away Test: 93,3 %
Testing period: 28 d

OECD Confirmatory Test: 91 %
Testing period: 24 - 70 d
Method: OECD 303 A

The surfactant(s) contained in this mixture complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.

13. Disposal considerations

Waste from residues / unused products : Dispose of in accordance with local regulations.
Contact waste disposal services.

14. Transport information

IATA

UN number : 1760
Description of the goods : Corrosive liquid, n.o.s.
(Didecyldimethylammonium chloride)
Class : 8
Packing group : III
Labels : 8

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IMDG

UN number : 1760
 Description of the goods : CORROSIVE LIQUID, N.O.S.
 (Didecyldimethylammonium chloride)
 Class : 8
 Packing group : III
 Labels : 8
 EmS Number 1 : F-A
 EmS Number 2 : S-B
 Marine pollutant : yes

ADR

UN number : 1760
 Description of the goods : CORROSIVE LIQUID, N.O.S.
 (Didecyldimethylammonium chloride)
 Class : 8
 Packing group : III
 Classification Code : C9
 Hazard identification No : 80
 Labels : 8
 Environmentally hazardous : yes

RID

UN number : 1760
 Description of the goods : CORROSIVE LIQUID, N.O.S.
 (Didecyldimethylammonium chloride)
 Class : 8
 Packing group : III
 Classification Code : C9
 Hazard identification No : 80
 Labels : 8
 Environmentally hazardous : yes

DOT

UN number : 1760
 Description of the goods : Corrosive liquids, n.o.s.
 (Didecyldimethylammonium chloride)
 Class : 8
 Packing group : III
 Labels : 8

TDG

UN number : 1760
 Description of the goods : CORROSIVE LIQUID, N.O.S.
 (Didecyldimethylammonium chloride)
 Class : 8
 Packing group : III
 Labels : 8

15. Regulatory information

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

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

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National legislation

Water contaminating class (Germany) : WGK 2 water endangering

Chemical Safety Assessment

not required

16. Other information**Full text of H-Statements referred to under sections 2 and 3.**

H301	Toxic if swallowed.
H314	Causes severe skin burns and eye damage.
H400	Very toxic to aquatic life.

Full text of R-phrases referred to under sections 2 and 3

R22	Harmful if swallowed.
R34	Causes burns.
R50	Very toxic to aquatic organisms.

Changes since the last version are highlighted in the margin. This version replaces all previous versions.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The 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 process, unless specified in the text.