

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

08 DEC 2011

Barquat™ MB-50

Version 3.0 / EN
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1. Identification of the substance/mixture and of the company/undertaking

Product information

Trade name : Barquat™ MB-50
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

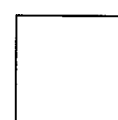
Symbol(s)



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 soap and water.
S36/37/39 : Wear suitable protective clothing, gloves and eye/face protection.

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- S45 : In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
 S61 : Avoid release to the environment. Refer to special instructions/ Safety data sheets.

3. Composition/information on ingredients

Substances / Mixtures : Mixture

Hazardous components

CAS-No.	EC-No. / Registration number	Classification	Concentration
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Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides

68424-85-1	270-325-2	Acute Tox.; 4; H302 Skin Corr.; 1B; H314 Aquatic Acute; 1; H400 C, N; R22, R34, R50	ca. 50 %
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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.

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.

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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).
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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.
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8. Exposure controls/personal protection

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
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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 : yellowish
Odour : aromatic

Safety data

pH : 5 - 7 (10 g/l ; 20 °C)
Crystallisation point: : 0 °C
Boiling point/boiling range : ca. 100 °C
Flash point : > 100 °C
Method: Pensky-Martens c.c.(DIN 51758)
Vapour pressure : < 0,00001 hPa (20 °C)
Information refers to the main component.
Density : 0,98 g/cm³ (20 °C)
Method: DIN 51757
Water solubility : soluble
Viscosity, dynamic : ca. 300 mPa.s (20 °C)

10. Stability and reactivity

Conditions to avoid : Protect from frost.
Materials to avoid : Strong oxidizing agents, Reducing agents
Hazardous decomposition products : Hydrogen chloride gas, nitrogen oxides (NO_x), Carbon oxides
Thermal decomposition : > 200 °C
Hazardous reactions : polymerisation :
Hazardous polymerisation does not occur.
Stable under normal conditions.

11. Toxicological information

The following toxicological data refer to:

N-Alkyl(C12-16)-N,N-dimethyl-N-benzylammonium chloride (CAS-No.: 68424-85-1)

Acute oral toxicity (LD50)	:	ca. 344 mg/kg Species: rat
Acute dermal toxicity (LD50)	:	ca. 3 340 mg/kg Species: rabbit
Skin irritation	:	Corrosive Species: rabbit Exposure time: 24 h Method: DOT
Eye irritation	:	Corrosive Species: rabbit Method: DOT
Sensitisation	:	not sensitizing Species: guinea pig Buehler Test Method: OECD Test Guideline 406
Genotoxicity in vitro	:	negative Ames test, <i>Salmonella typhimurium</i> Method: OECD 471 negative Chromosome aberration test in vitro, Human lymphocytes Method: OECD 473

12. Ecological information

The following ecotoxicological data refer to:

N-Alkyl(C12-16)-N,N-dimethyl-N-benzylammonium chloride (CAS-No.: 68424-85-1)

Ecotoxicity effects

Toxicity to fish (LC50)	:	0,93 mg/l Species: <i>Oncorhynchus mykiss</i> (rainbow trout) Acute toxicity Exposure time: 96 h Method: US-EPA
Toxicity to fish (LC50)	:	0,28 mg/l Species: <i>Pimephales promelas</i> (fathead minnow) Acute toxicity Exposure time: 96 h Method: US-EPA
Toxicity to fish (LC50)	:	0,515 mg/l Species: <i>Lepomis macrochirus</i> (Bluegill sunfish) Acute toxicity Exposure time: 96 h Method: US-EPA
Toxicity to fish (NOEC)	:	0,032 mg/l Species: <i>Pimephales promelas</i> (fathead minnow) Early-life Stage Exposure time: 34 d Method: EPA-FIFRA
Toxicity to daphnia (EC50)	:	0,016 mg/l Species: <i>Daphnia magna</i> (Water flea) Immobilization Exposure time: 48 h Method: OECD Test Guideline 202
Toxicity to daphnia (NOEC)	:	0,0042 mg/l Species: <i>Daphnia magna</i> (Water flea) Reproduction Test Exposure time: 21 d Method: EPA-FIFRA
Toxicity to daphnia (NOEC)	:	520 mg/l Species: <i>Chironomus</i> sp. Chronic toxicity Exposure time: 28 d Method: US-EPA
Toxicity to algae (ErC50)	:	0,049 mg/l Species: <i>Pseudokirchneriella subcapitata</i> (green algae) Cell multiplication inhibition test Exposure time: 72 h Method: OECD Test Guideline 201

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Toxicity to bacteria (EC50)	: 7,75 mg/l Species: activated sludge Respiration inhibition Exposure time: 3 h Method: OECD 209
Toxicity to bacteria (EC100)	: ca. 16 mg/l Species: Pseudomonas putida Growth inhibition Exposure time: 96 h
Toxicity to soil dwelling organisms (LC50)	: 7 070 mg/kg Species: Eisenia fetida (earthworms) Acute toxicity Exposure time: 14 d Method: OECD 207
Behaviour in environmental compartments	: Adsorption/Soil Method: EPA-FIFRA

Persistence and degradability

Stability in water	: hydrolytically stable Method: EPA-FIFRA
Biodegradability	: OECD Confirmatory Test: > 90 % Method: OECD 303 A Modified SCAS Test: > 99 % Testing period: 7 d Method: OECD 302 A CO2 Evolution: 95,5 % Readily biodegradable. Testing period: 28 d Method: OECD 301 B

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.
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14. Transport information**IATA**

UN-Number : 1760
Description of the goods : Corrosive liquid, n.o.s.
(Alkyldimethylbenzylammoniumchloride)
Class : 8
Packing group : II
Labels : 8

IMDG

UN-Number : 1760
Description of the goods : CORROSIVE LIQUID, N.O.S.
(Alkyldimethylbenzylammoniumchloride)
Class : 8
Packing group : II
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.
(Alkyldimethylbenzylammoniumchloride)
Class : 8
Packing group : II
Classification Code : C9
Hazard identification No : 80
Labels : 8

RID

UN-Number : 1760
Description of the goods : CORROSIVE LIQUID, N.O.S.
(Alkyldimethylbenzylammoniumchloride)
Class : 8
Packing group : II
Classification Code : C9
Hazard identification No : 80
Labels : 8

DOT

UN-Number : 1760
Description of the goods : Corrosive liquids, n.o.s.
(Alkyldimethylbenzylammoniumchloride)
Class : 8
Packing group : II
Labels : 8

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TDG

UN-Number : 1760
Description of the goods : CORROSIVE LIQUID, N.O.S.
(Alkyldimethylbenzylammoniumchloride)
Class : 8
Packing group : II
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.

Chemical Safety Assessment

not required

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

H302 Harmful 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.