

SAFETY DATA SHEET

Bodedex forte

Version 1.4 Revision Date: 21.04.2017 SDS Number: R11214 Date of last issue: 07.03.2017
Date of first issue: 01.07.2014

1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Bodedex forte

Manufacturer or supplier's details

Manufacturer : BODE Chemie GmbH
Melanchthonstraße 27
22525 Hamburg
Tel.: +49 (0)40 / 54 00 60

Supplier :

Responsible Department : Scientific Affairs
KundenService-SiDa@bode-chemie.de

Emergency telephone number : Giftnotruf Göttingen
24h-Phone +49 (0)551 / 1 92 40

Recommended use of the chemical and restrictions on use

Recommended use : In-door use
Cleansing agents, alkaline.
For further information, refer to the product technical data sheet.

Restrictions on use : Restricted to professional users.

2. HAZARDS IDENTIFICATION

GHS Classification

Skin corrosion/irritation : Category 2

Serious eye damage/eye irritation : Category 1

GHS label elements

Hazard pictograms :



Signal word : Danger

Hazard statements : H315 Causes skin irritation.
H318 Causes serious eye damage.

Precautionary statements : **Prevention:**
P280 Wear protective gloves/ eye protection/ face protection.

Response:
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.
P310 Immediately call a POISON CENTER/doctor.
P332 + P313 If skin irritation occurs: Get medical advice/ attention.

Disposal:
P501 Dispose of contents/ container to an approved waste disposal

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plant.

Other hazards which do not result in classification

None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Hazardous components

Chemical name	CAS-No.	Concentration (% w/w)
propane-1,2-diol	57-55-6	>= 10 - < 20
Tridecanol, branched, ethoxylated	69011-36-5	>= 1 - < 10
Alcohols, C12-14. ethoxylated	68439-50-9	>= 1 - < 10
[[[2-hydroxyethyl]imino]bis(methylene)]bisphosphonic acid	5995-42-6	>= 1 - < 10
Quaternary ammonium compounds, [2-[[2-[(2-carboxyethyl)(2-hydroxyethyl)amino]ethyl]amino]-2-oxoethyl]coco alkyl dimethyl, hydroxides,	100085-64-1	>= 1 - < 10

4. FIRST AID MEASURES

General advice : Get medical attention.

If inhaled : Remove to fresh air.

In case of skin contact : Wash off with soap and water.

In case of eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

If swallowed : Do NOT induce vomiting.
Rinse mouth.

Most important symptoms and effects, both acute and delayed : None known.

Notes to physician : For specialist advice physicians should contact the Poisons Information Service.

5. FIREFIGHTING MEASURES

Suitable extinguishing media : Dry powder
Foam
Water spray jet
Carbon dioxide (CO₂)

Unsuitable extinguishing media : none

Hazardous combustion products : No hazardous combustion products are known

Specific extinguishing methods : Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

Special protective equipment for firefighters : Use personal protective equipment.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency pro- : Ensure adequate ventilation.

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cedures

- Environmental precautions : Should not be released into the environment.
- Methods and materials for containment and cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).
Sweep up and shovel into suitable containers for disposal.

7. HANDLING AND STORAGE

- Advice on protection against fire and explosion : No special protective measures against fire required.
- Advice on safe handling : Prepare the working solution as given on the label(s) and/or the user instructions.
- Conditions for safe storage : Store at room temperature in the original container.
- Materials to avoid : Keep away from food and drink.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

Personal protective equipment

Hand protection

In case of full contact: Nitrile rubber

- Material : Protective gloves complying with EN 374.
Break through time : > 480 min
Glove thickness : 0,1 mm
Protective index : Class 6
: Peha-soft nitrile guard

Eye protection : Tightly fitting safety goggles

Hygiene measures : Avoid contact with eyes.
Do not get on skin.
Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

- Appearance : liquid
- Colour : light yellow
- Odour : mild
- pH : 8 (20 °C)
- Melting point/range : not determined
- Boiling point/boiling range : 100 °C
- Flash point : Not applicable
- Flammability (solid, gas) : not auto-flammable
- Vapour pressure : No data available

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Density	:	1,05 g/cm ³ (20 °C)
Solubility(ies)	:	
Water solubility	:	completely miscible

10. STABILITY AND REACTIVITY

Reactivity	:	No decomposition if stored and applied as directed.
Chemical stability	:	The product is chemically stable.
Possibility of hazardous reactions	:	None reasonably foreseeable.
Conditions to avoid	:	Heat Strong sunlight for prolonged periods.
Incompatible materials	:	None.

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Product:

Acute oral toxicity	:	Acute toxicity estimate: > 5.000 mg/kg Method: Calculation method
Acute dermal toxicity	:	Acute toxicity estimate: > 5.000 mg/kg Method: Calculation method

Components:

propane-1,2-diol (CAS: 57-55-6):

Acute oral toxicity	:	LD50 Oral (Rat): > 22.000 mg/kg Method: Calculation method
Acute dermal toxicity	:	LD50 Dermal (Rabbit): > 2.000 mg/kg

Tridecanol, branched, ethoxylated (CAS: 69011-36-5):

Acute oral toxicity	:	LD50 Oral (Rat): > 5.000 mg/kg Method: Expert judgement
Acute dermal toxicity	:	LD50 Dermal (Rabbit): > 2.000 mg/kg Method: Expert judgement

Alcohols, C12-14. ethoxylated (CAS: 68439-50-9):

Acute oral toxicity	:	LD50 Oral (Rat): 2.000 mg/kg
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[[[(2-hydroxyethyl)imino]bis(methylene)]bisphosphonic acid (CAS: 5995-42-6):

Acute oral toxicity	:	LD50: > 2.000 mg/kg
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Quaternary ammonium compounds, [2-[[2-[(2-carboxyethyl)(2-hydroxyethyl)amino]ethyl]amino]-2-oxoethyl]coco alkyldimethyl, hydroxides, (CAS: 100085-64-1):

Acute oral toxicity	:	LD50 (Rat): > 2.000 mg/kg Method: OECD Test Guideline 401
Acute dermal toxicity	:	LD50 (Rat): > 2.000 mg/kg Method: OECD Test Guideline 402

Bodedex forte**Skin corrosion/irritation****Components:****propane-1,2-diol (CAS: 57-55-6):**

Result: No skin irritation

Tridecanol, branched, ethoxylated (CAS: 69011-36-5):

Species: Rabbit

Result: No skin irritation

Alcohols, C12-14. ethoxylated (CAS: 68439-50-9):

Result: Repeated exposure may cause skin dryness or cracking.

[[2-(2-hydroxyethyl)imino]bis(methylene)]bisphosphonic acid (CAS: 5995-42-6):

Species: Rabbit

Method: OECD Test Guideline 404

Result: Corrosive

Quaternary ammonium compounds, [2-[[2-[(2-carboxyethyl)(2-hydroxyethyl)amino]ethyl]amino]-2-oxoethyl]coco alkyldimethyl, hydroxides, (CAS: 100085-64-1):

Species: Rabbit

Method: OECD Test Guideline 404

Result: Skin irritation

Serious eye damage/eye irritation**Components:****propane-1,2-diol (CAS: 57-55-6):**

Result: No eye irritation

Tridecanol, branched, ethoxylated (CAS: 69011-36-5):

Species: Rabbit

Method: OECD Test Guideline 437

Result: Risk of serious damage to eyes.

Alcohols, C12-14. ethoxylated (CAS: 68439-50-9):

Result: Irreversible effects on the eye

[[2-(2-hydroxyethyl)imino]bis(methylene)]bisphosphonic acid (CAS: 5995-42-6):

Species: Rabbit

Assessment: Causes burns.

Result: Corrosive

Quaternary ammonium compounds, [2-[[2-[(2-carboxyethyl)(2-hydroxyethyl)amino]ethyl]amino]-2-oxoethyl]coco alkyldimethyl, hydroxides, (CAS: 100085-64-1):

Species: Rabbit

Assessment: Irritating to eyes.

Method: OECD Test Guideline 405

Result: Eye irritation

Respiratory or skin sensitisation**Product:**

Result: Does not cause skin sensitisation.

Result: Does not cause respiratory sensitisation.

Components:**propane-1,2-diol (CAS: 57-55-6):**

Species: Guinea pig

Method: Maximisation Test

Result: Does not cause skin sensitisation.

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Tridecanol, branched, ethoxylated (CAS: 69011-36-5):

Test Type: Maximisation Test

Species: Guinea pig

Result: Did not cause sensitisation on laboratory animals.

[[2-hydroxyethyl]imino]bis(methylene)]bisphosphonic acid (CAS: 5995-42-6):

Species: Guinea pig

Method: OECD Test Guideline 406

Result: Does not cause skin sensitisation.

Germ cell mutagenicity

No data available

Carcinogenicity

No data available

Reproductive toxicity

No data available

STOT - single exposure

No data available

STOT - repeated exposure

No data available

Repeated dose toxicity

No data available

Aspiration toxicity

No data available

Experience with human exposure

No data available

Toxicology, Metabolism, Distribution

No data available

Neurological effects

No data available

12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:

propane-1,2-diol (CAS: 57-55-6):

Toxicity to fish	:	LC50 (Oncorhynchus mykiss (rainbow trout)): 40.613 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): > 100 mg/l Exposure time: 48 h
Toxicity to algae	:	EC50 (Scenedesmus capricornutum (fresh water algae)): 24.200 mg/l Exposure time: 72 h

Tridecanol, branched, ethoxylated (CAS: 69011-36-5):

Toxicity to fish	:	LC50 (Cyprinus carpio (Carp)): > 1 mg/l Exposure time: 96 h
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Test Type: flow-through test
Method: OECD Test Guideline 203

- Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 1 mg/l
Exposure time: 48 h
Method: OECD Test Guideline 202
- Toxicity to algae : EC50 (Desmodesmus subspicatus (green algae)): > 1 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201
- Toxicity to microorganisms : IC50 (Pseudomonas putida): > 1.000 mg/l
Exposure time: 16 h
- Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: > 1 mg/l
Exposure time: 21 d
Species: Daphnia magna (Water flea)

Alcohols, C12-14. ethoxylated (CAS: 68439-50-9):

- Toxicity to fish : LC50 (Fish): > 1 mg/l
Exposure time: 96 h
- Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 1 mg/l
Exposure time: 48 h
- Toxicity to algae : IC50 (Scenedesmus capricornutum (fresh water algae)): > 1 mg/l
Exposure time: 72 h
- NOEC (Scenedesmus capricornutum (fresh water algae)): 0,14 mg/l
- M-Factor (Chronic aquatic toxicity) : 1

Quaternary ammonium compounds, [2-[[2-[(2-carboxyethyl)(2-hydroxyethyl)amino]ethyl]amino]-2-oxoethyl]coco alkyl dimethyl, hydroxides, (CAS: 100085-64-1):

- Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 7,5 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 203
- Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 2,2 mg/l
Exposure time: 48 h
Method: OECD Test Guideline 202
- Toxicity to algae : EbC50 (Selenastrum capricornutum (green algae)): 0,075 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201
- M-Factor (Acute aquatic toxicity) : 10

Persistence and degradability

Product:

- Biodegradability : Remarks: The surfactant(s) contained in this preparation 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.

Components:

- propane-1,2-diol (CAS: 57-55-6):**
Biodegradability : Biodegradation: > 70 %

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Bioaccumulative potential

No data available

Mobility in soil

No data available

Other adverse effects

No data available

13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : Dispose of as hazardous waste in compliance with local and national regulations.
Waste codes should be assigned by the user, preferably in discussion with the waste disposal authorities.

Contaminated packaging : Empty remaining contents.
Store containers and offer for recycling of material when in accordance with the local regulations.

14. TRANSPORT INFORMATION

14.1 UN number

Not regulated as a dangerous good

14.2 UN proper shipping name

Not regulated as a dangerous good

14.3 Transport hazard class(es)

Not regulated as a dangerous good

14.4 Packing group

Not regulated as a dangerous good

14.5 Environmental hazards

Not regulated as a dangerous good

14.6 Special precautions for user

Not applicable

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable for product as supplied.

15. REGULATORY INFORMATION

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

International Regulations

16. OTHER INFORMATION

Full text of other abbreviations

AICS - Australian Inventory of Chemical Substances; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; CPR - Controlled Products Regulations; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - Interna-

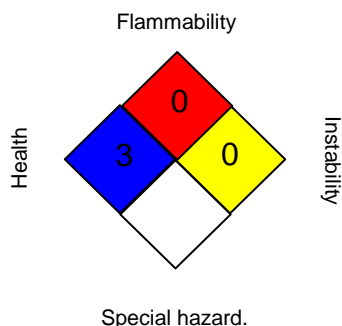
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tional Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

Further information

NFPA:



HMIS® IV:

HEALTH	/	3
FLAMMABILITY		0
PHYSICAL HAZARD		0

HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks.

Safety datasheet sections which have been updated:

16. Other information

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.

TC / EN