SAFETY DATA SHEET

Bodedex forte

Version	Revision Date:	SDS Number:	Date of last issue: 25.01.2023
1.15	29.03.2023	R11214	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 (Germany)
Tel.: +49 (0)40 / 54 00 60

Supplier :

Responsible Department : Scientific Affairs
sds@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

Long-term (chronic) aquatic hazard : Category 3

GHS label elements

Hazard pictograms :

Signal word : Danger

Hazard statements : H315 Causes skin irritation.
H318 Causes serious eye damage.
H412 Harmful to aquatic life with long lasting effects.

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 plant.

Other hazards which do not result in classification

None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Components

Chemical name	CAS-No.	Concentration (% w/w)
propane-1,2-diol	57-55-6	>= 10 - < 20
Tridecanol, branched, ethoxylated	69011-36-5	>= 3 - < 10
Alcohols, C12-14. ethoxylated	68439-50-9	>= 3 - < 10
[[(2-hydroxyethyl)imino]bis(methylene)]bisphosphonic acid	Not Assigned	>= 3 - < 5
Quaternary ammonium compounds, [2-[[2-[(2-carboxyethyl)(2-hydroxyethyl)amino]ethyl]amino]-2-oxoethyl]coco alkyldimethyl, hydroxides,	100085-64-1	>= 1 - < 2,5
N-(2-ethylhexyl)-3,5,5-trimethylhexanamide	1700656-13-8	>= 0,25 - < 1

4. FIRST AID MEASURES

General advice : If you feel unwell, seek medical advice (show the label where possible).

If inhaled : Move to fresh air.

In case of skin contact : Wash off with soap and water.
If symptoms persist, call a physician.

In case of eye contact : Immediately flush eye(s) with plenty of water.
If eye irritation persists, consult a specialist.

If swallowed : Do NOT induce vomiting.
Rinse mouth.

Most important symptoms and effects, both acute and delayed : Causes skin irritation.
Causes serious eye damage.

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

5. FIREFIGHTING MEASURES

Suitable extinguishing media : Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Hazardous combustion products : No hazardous combustion products are known

Specific extinguishing methods : Standard procedure for chemical fires.

Special protective equipment for firefighters : Use personal protective equipment.
In the event of fire, wear self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	:	Ensure adequate ventilation. Use personal protective equipment.
Environmental precautions	:	Should not be released into the environment.
Methods and materials for containment and cleaning up	:	Clean-up methods - small spillage Wipe up with absorbent material (e.g. cloth, fleece). Clean-up methods - large spillage 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 safe handling	:	Prepare the working solution as given on the label(s) and/or the user instructions. Avoid contact with eyes.
Conditions for safe storage	:	Store in original container.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

Personal protective equipment

Respiratory protection	:	No personal respiratory protective equipment normally required.
Hand protection		
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	:	Safety glasses with side-shields conforming to EN166
Skin and body protection	:	Work uniform or laboratory coat. Choose body protection according to the amount and concentration of the dangerous substance at the work place.
Hygiene measures	:	Handle in accordance with good industrial hygiene and safety practice. Keep away from food and drink.

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	:	does not flash
Flammability (solid, gas)	:	not auto-flammable
Density	:	1,051 g/cm3 (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.

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Not classified based on available information.

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

[[(2-hydroxyethyl)imino]bis(methylene)]bisphosphonic acid:

Acute oral toxicity	:	LD50 Oral (Rat): 250 mg/kg

Skin corrosion/irritation

Causes skin irritation.

Components:

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

Species	:	Rabbit
Method	:	OECD Test Guideline 404
Result	:	No skin irritation

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

Species	:	Rabbit
Result	:	No skin irritation

[[(2-hydroxyethyl)imino]bis(methylene)]bisphosphonic acid:

Species	:	Rabbit
Method	:	OECD Test Guideline 404
Result	:	Causes burns.

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

Causes serious eye damage.

Components:

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

Species	:	Rabbit
Method	:	OECD Test Guideline 405
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	:	Risk of serious damage to eyes.

[[(2-hydroxyethyl)imino]bis(methylene)]bisphosphonic acid:

Species	:	Rabbit
Assessment	:	Risk of serious damage to eyes.
Method	:	OECD Test Guideline 405

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

Skin sensitisation

Not classified based on available information.

Respiratory sensitisation

Not classified based on available information.

Components:

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

Test Type	:	Maximisation Test
Species	:	Guinea pig
Method	:	OECD Test Guideline 406
Result	:	Does not cause skin sensitisation.

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:

Species	:	Guinea pig
Method	:	OECD Test Guideline 406
Result	:	Does not cause skin sensitisation.

Germ cell mutagenicity

Not classified based on available information.

Carcinogenicity

Not classified based on available information.

Reproductive toxicity

Not classified based on available information.

STOT - single exposure

Not classified based on available information.

STOT - repeated exposure

Not classified based on available information.

Repeated dose toxicity

No data available

Aspiration toxicity

Not classified based on available information.

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 Method: OECD Test Guideline 203
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Ceriodaphnia (water flea)): 18.340 mg/l Exposure time: 48 h Method: OECD Test Guideline 202
Toxicity to algae/aquatic plants	:	EC50 (Pseudokirchneriella subcapitata (green algae)): 19.000 mg/l Exposure time: 96 h Method: OECD Test Guideline 201

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

Toxicity to fish	:	LC50 (Brachydanio rerio (zebrafish)): > 10 mg/l Exposure time: 96 h 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/aquatic plants	:	EC50 (Desmodesmus subspicatus (green algae)): > 1 mg/l Exposure time: 72 h Method: OECD Test Guideline 201

[[(2-hydroxyethyl)imino]bis(methylene)]bisphosphonic acid:

Toxicity to fish	:	LC50 (Fish): 1.000 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): 64 mg/l Exposure time: 48 h
Toxicity to algae/aquatic plants	:	EC50 (algae): 46 mg/l Exposure time: 72 h

N-(2-ethylhexyl)-3,5,5-trimethylhexanamide (CAS: 1700656-13-8):

Toxicity to fish	:	LC50 (Danio rerio (zebra fish)): > 1.000 mg/l Exposure time: 96 h Method: OECD Test Guideline 203
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): 0,475 mg/l Exposure time: 48 h Method: OECD Test Guideline 202
Toxicity to algae/aquatic plants	:	ErC50 (Desmodesmus subspicatus (green algae)): 0,962 mg/l Exposure time: 72 h Method: OECD Test Guideline 201 NOEC (Desmodesmus subspicatus (green algae)): 0,31 mg/l Exposure time: 72 h
M-Factor (Acute aquatic toxicity)	:	1
M-Factor (Chronic aquatic toxicity)	:	1

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 %

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

Biodegradability : Result: Totally biodegradable

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

Biodegradability : Result: Readily biodegradable.

[[(2-hydroxyethyl)imino]bis(methylene)]bisphosphonic acid:

Biodegradability : Biodegradation: > 70 %
Method: OECD Test Guideline 302B
Remarks: Expected to be biodegradable

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

Biodegradability : Result: Readily biodegradable.
Biodegradation: > 70 %
Method: OECD Test Guideline 301A

Bioaccumulative potential

Components:

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

Partition coefficient: n-octanol/water : log Pow: -1,07

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

ADR
Not regulated as a dangerous good

UNRTDG
Not regulated as a dangerous good

IATA-DGR
Not regulated as a dangerous good

IMDG-Code
Not regulated as a dangerous good

Transport in bulk according to IMO instruments
Not applicable for product as supplied.

Special precautions for user
Not applicable

15. REGULATORY INFORMATION

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

Other international regulations

The components of this product are reported in the following inventories:

TSCA : Product contains substance(s) not listed on TSCA inventory.

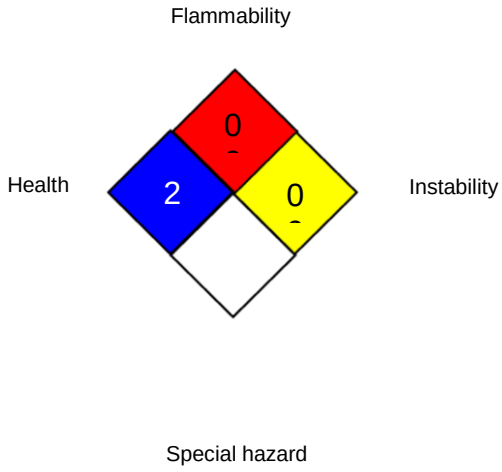
16. OTHER INFORMATION

Revision Date : 29.03.2023

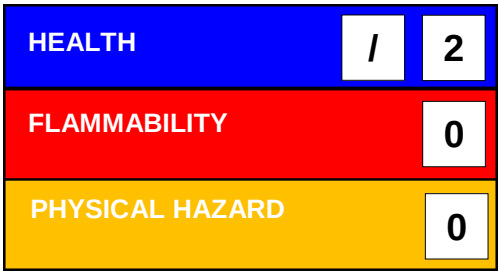
Date format : yyyy/mm/dd

Further information

NFPA:



HMIS® IV:



HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. The "*" represents a chronic hazard, while the "/" represents the absence of a chronic hazard.

Full text of other abbreviations

AIIC - Australian Inventory of Industrial Chemicals; 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; 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 - International 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; TECI - Thailand Existing Chemicals Inventory; 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

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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.

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