

SAFETY DATA SHEET

Bomix plus

Version	Revision Date:	SDS Number:	Date of last issue: 23.10.2018
1.4	28.06.2019	R11200	Date of first issue: 17.04.2014

1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Bomix plus

Product code : R11200

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
Disinfectants and general biocidal products
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 : Sub-category 1B

Serious eye damage/eye irritation : Category 1

Short-term (acute) aquatic hazard : Category 1

Long-term (chronic) aquatic hazard : Category 1

GHS label elements

Hazard pictograms :



Signal word : Danger

Hazard statements : H314 Causes severe skin burns and eye damage.
H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements : P273 Avoid release to the environment.

Prevention:

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:

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P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.

P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.

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)
N,N-Didecyl-N-methyl-poly(oxyethyl)ammonioopropanoate	94667-33-1	≥ 10 - < 20
Tridecanol, branched, ethoxylated	69011-36-5	≥ 3 - < 10
ethylene glycol	107-21-1	≥ 1 - < 10

4. FIRST AID MEASURES

General advice : Call a physician immediately.

If inhaled : If breathed in, move person into fresh air.

In case of skin contact : Take off contaminated clothing and shoes immediately. Wash off with plenty of water.

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

If swallowed : Rinse mouth. Do NOT induce vomiting.

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 : Water spray jet
Dry powder
Foam
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 : Use personal protective equipment.

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In the event of fire, wear self-contained breathing apparatus.

Personal precautions, protective equipment and emergency procedures	:	Ensure adequate ventilation.
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). Keep in suitable, closed containers for disposal.

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.

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
ethylene glycol	107-21-1	TWA (Vapour)	25 ppm	ACGIH
		STEL (Vapour)	50 ppm	ACGIH
		STEL (Inhalable fraction, Aerosol only)	10 mg/m3	ACGIH

Hand protection

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

Skin and body protection : Work uniform or laboratory coat.
Remove and wash contaminated clothing before re-use.
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.
Avoid contact with the skin and the eyes.

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Appearance	: liquid
Colour	: dark green
Odour	: characteristic
pH	: 7 (20 °C)
Boiling point/boiling range	: No data available
Flash point	: Not applicable
Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Density	: 1,02 g/cm ³ (20 °C)
Solubility(ies) Water solubility	: soluble

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

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:

N,N-Didecyl-N-methyl-poly(oxyethyl)ammoniopropanoate (CAS: 94667-33-1):

Acute oral toxicity	: LD50 (Rat): 1.157 mg/kg Method: OECD Test Guideline 401
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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

ethylene glycol (CAS: 107-21-1):

Acute dermal toxicity	: LD50 Dermal (Rabbit): 9.250 mg/kg
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Skin corrosion/irritation

Components:

N,N-Didecyl-N-methyl-poly(oxyethyl)ammoniopropanoate (CAS: 94667-33-1):

Species: Rabbit

Assessment: Corrosive

Method: OECD Test Guideline 404

Result: Corrosive after 3 minutes to 1 hour of exposure

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

Species: Rabbit

Result: No skin irritation

ethylene glycol (CAS: 107-21-1):

Result: No skin irritation

Serious eye damage/eye irritation

Components:

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

Species: Rabbit

Method: OECD Test Guideline 437

Result: Risk of serious damage to eyes.

Respiratory or skin sensitisation

Components:

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

Test Type: Maximisation Test

Species: Guinea pig

Result: Did not cause sensitisation on laboratory animals.

Germ cell mutagenicity

No data available

Carcinogenicity

No data available

Reproductive toxicity

No data available

STOT - single exposure

No data available

STOT - repeated exposure

Components:

ethylene glycol (CAS: 107-21-1):

Assessment: May cause damage to organs through prolonged or repeated exposure.

Repeated dose toxicity

No data available

Aspiration toxicity

No data available

Experience with human exposure

No data available

Bomix plus**Toxicology, Metabolism, Distribution**

No data available

Neurological effects

No data available

12. ECOLOGICAL INFORMATION**Ecotoxicity****Components:****N,N-Didecyl-N-methyl-poly(oxyethyl)ammoniopropanoate (CAS: 94667-33-1):**

Toxicity to fish	:	LC50 (Lepomis macrochirus (Bluegill sunfish)): 0,52 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): 0,07 mg/l Exposure time: 48 h Method: OECD Test Guideline 202
Toxicity to algae	:	EbC50 (Desmodesmus subspicatus (green algae)): 0,15 mg/l Exposure time: 72 h Method: OECD Test Guideline 201
M-Factor (Acute aquatic toxicity)	:	10
M-Factor (Chronic aquatic toxicity)	:	10

Ecotoxicology Assessment

Chronic aquatic toxicity : Very toxic to aquatic life with long lasting effects.

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

Toxicity to fish	:	LC50 (Cyprinus carpio (Carp)): > 1 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	:	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)

ethylene glycol (CAS: 107-21-1):

Toxicity to fish	:	LC50 (Pimephales promelas (fathead minnow)): > 10.000 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): 41.100 mg/l Exposure time: 48 h
Toxicity to algae	:	EC50 (Scenedesmus capricornutum (fresh water algae)): > 10.000 mg/l Exposure time: 72 h

Bomix plus**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.

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 : The product should not be allowed to enter drains, water courses or the soil.
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.
Clean container with water.
Offer rinsed packaging material to local recycling facilities.

14. TRANSPORT INFORMATION**ADR**

UN number : UN 1903
Proper shipping name : DISINFECTANT, LIQUID, CORROSIVE, N.O.S.
(N,N-Didecyl-N-methyl-poly(oxyethyl)ammoniopropanoate)

Class : 8
Packing group : II
Labels : 8
Hazard Identification Number : 80
Tunnel restriction code : (E)
Environmentally hazardous : yes

UNRTDG

UN number : UN 1903
Proper shipping name : DISINFECTANT, LIQUID, CORROSIVE, N.O.S.
(N,N-Didecyl-N-methyl-poly(oxyethyl)ammoniopropanoate)

Class : 8
Packing group : II
Labels : 8

IATA-DGR

UN/ID No. : UN 1903
Proper shipping name : Disinfectant, liquid, corrosive, n.o.s.
(N,N-Didecyl-N-methyl-poly(oxyethyl)ammoniopropanoate)

Class : 8
Packing group : II
Labels : Class 8 - Corrosive

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Packing instruction (cargo aircraft) : 855

Packing instruction (passenger aircraft) : 851

IMDG-Code

UN number : UN 1903

Proper shipping name : DISINFECTANT, LIQUID, CORROSIVE, N.O.S.
(N,N-Didecyl-N-methyl-poly(oxyethyl)ammoniopropanoate)

Class : 8

Packing group : II

Labels : 8

EmS Code : F-A, S-B

Marine pollutant : yes

Transport in bulk according to IMO instruments

Not applicable for product as supplied.

Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

15. REGULATORY INFORMATION

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

International Regulations

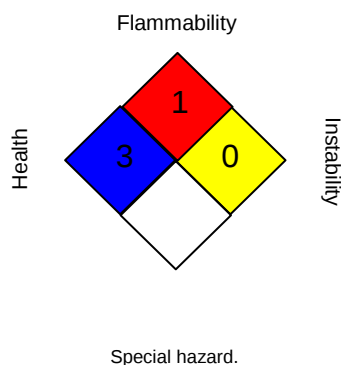
16. OTHER INFORMATION

Safety datasheet sections which have been updated:

14. Transport information

Further information

NFPA:



HMIS® IV:

HEALTH	*	3
FLAMMABILITY		1
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. The "*" represents a chronic hazard, while the "/" represents the absence of a chronic hazard.

Full text of other abbreviations

ACGIH : USA. ACGIH Threshold Limit Values (TLV)
ACGIH / TWA : 8-hour, time-weighted average
ACGIH / STEL : Short-term exposure limit

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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 - 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; 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

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