SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH)

Revision date: 10 Sept 2026
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Version: 5

DEUREX
THE WAX COMPANY

BIOMER 88 D

SECTION 1: Identification of the substance/mixture and of the company/ undertaking

1.1. Product identifier

Trade name/designation:

BIOMER 88 D

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture:

Additive

1.3. Details of the supplier of the safety data sheet

Supplier (manufacturer/importer/only representative/downstream user/distributor):

DEUREX AG
Dr.-Bergius-Str. 8 – 12
06729 Elsteraue
Germany
Telephone: +49(0)3441 / 8 29 29 29
Telefax: +49(0)3441 / 8 29 29 28
E-mail: info@deurex.com
Website: www.deurex.com

1.4. Emergency telephone number

Common poisons information centre of the Federal States
Mecklenburg-Western Pomerania, Saxony, Saxony-Anhalt and Thuringia
D-99089 Erfurt, 24h: +49(0)361-730730

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP]

Hazard classes and hazard categories	Hazard statements	Classification procedure
Serious eye damage/eye irritation *(Eye Dam. 1)*	H318: Causes serious eye damage.	Calculation method.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms:



GHS05
Corrosion

Signal word: Danger

GeSi.de

Hazard components for labelling:
Mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one [EC no. 247-500-7] and2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1); Alcohols, C11-14-iso-, C13-rich, ethoxylated; bronopol

Hazard statements for health hazards	
H318	Causes serious eye damage.

Supplemental hazard information	
EUH208	Contains Mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6]. (3:1). May produce an allergic reaction.

Precautionary statements Prevention	
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/....

Precautionary statements Response	
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/....

Special rules for supplemental label elements for certain mixtures:
22,7 % percent of the mixture consists of ingredient(s) of unknown acute toxicity (inhalative).

2.3. Other hazards
No data available

SECTION 3: Composition/information on ingredients

3.2. Mixtures
Description:
Dispersion
Additional information:
Biodegradable.
Hazardous ingredients / Hazardous impurities / Stabilisers:

Product identifiers	Substance name Classification according to Regulation (EC) No 1272/2008 [CLP]	Concentration
CAS No.: 78330-21-9	**Alcohols, C11-14-iso-, C13-rich, ethoxylated** Acute Tox. 4 (H302), Aquatic Chronic 3 (H412), Eye Dam. 1 (H318)  Danger **Acute Toxicity Estimate** ATE (oral) 500 mg/kg	2 – < 3.4 weight-%
CAS No.: 52-51-7 EC No.: 200-143-0 Index No.: 603-085-00-8 REACH No.: 01-2119980938-15	**bronopol** Acute Tox. 4 (H312, H302), Aquatic Acute 1 (H400), Aquatic Chronic 1 (H410), Eye Dam. 1 (H318), STOT SE 3 (H335), Skin Irrit. 2 (H315)  Danger M-factor (acute): 10 M-factor (chronic): 1 **Acute Toxicity Estimate** ATE (oral) 193 mg/kg ATE (dermal) > 2,000 mg/kg ATE (inhalation, dust/mist) > 0.12 – < 1.14 mg/L	0 – ≤ 0.01 weight-%

BIOMER 88 D

Product identifiers	Substance name Classification according to Regulation (EC) No 1272/2008 [CLP]	Concentration
CAS No.: 55965-84-9 EC No.: 911-418-6 Index No.: 613-167-00-5 REACH No.: 01-2120764691-48	**Mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one [EC no. 247-500-7] and2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)** Acute Tox. 2 (H330, H310), Acute Tox. 3 (H301), Aquatic Acute 1 (H400), Aquatic Chronic 1 (H410), Eye Dam. 1 (H318), Skin Corr. 1C (H314), Skin Sens. 1A (H317)  Danger EUH071 M-factor (acute): 100 M-factor (chronic): 100 **Specific concentration limit (SCL)** Skin Corr. 1C; H314: C ≥ 0.6% Skin Irrit. 2; H315: 0.06% ≤ C < 0.6% Eye Dam. 1; H318: C ≥ 0.6% Eye Irrit. 2; H319: 0.06% ≤ C < 0.6% Skin Sens. 1A; H317: C ≥ 0.0015% **Acute Toxicity Estimate** ATE (oral) 66 mg/kg ATE (dermal) > 1,008 mg/kg ATE (inhalation, dust/mist) 0.33 mg/L	0 – ≤ 0.00115 weight-%

Full text of H- and EUH-phrases: see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information:
In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). Remove victim out of the danger area. Remove contaminated, saturated clothing. If unconscious but breathing normally, place in recovery position and seek medical advice. Do not leave affected person unattended. Warning First aider: Pay attention to self-protection!

Following inhalation:
Provide fresh air. In case of respiratory tract irritation, consult a physician.

In case of skin contact:
After contact with skin, wash immediately with plenty of water and soap. If skin irritation or rash occurs: Get medical advice/attention.

After eye contact:
In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

Following ingestion:
Rinse mouth. Let 1 glass of water be drunken in little sips (dilution effect). Get medical advice/attention if you feel unwell.

Self-protection of the first aider:
Use personal protection equipment.

4.2. Most important symptoms and effects, both acute and delayed

Serious eye damage/eye irritation

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

No data available

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products:
In case of fire: Gases/vapours, toxic

5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing.

5.4. Additional information
Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Personal precautions:
Remove persons to safety.

Protective equipment:
Wear protective gloves/protective clothing/eye protection/face protection.

6.1.2. For emergency responders

Personal protection equipment:
Personal protection equipment: see section 8

6.2. Environmental precautions
Do not allow to enter into surface water or drains.

6.3. Methods and material for containment and cleaning up

For containment:
Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).

6.4. Reference to other sections
Safe handling: see section 7 Personal protection equipment: see section 8 Disposal: see section 13

6.5. Additional information
Use appropriate container to avoid environmental contamination.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Protective measures

Advices on safe handling:
Wear personal protection equipment (refer to section 8).

Environmental precautions:
Do not allow to enter into surface water or drains.

Advices on general occupational hygiene
When using do not eat, drink, smoke, sniff. Avoid contact with skin, eyes and clothes.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions:
Keep container tightly closed in a cool, well-ventilated place.
Avoid high temperatures or direct sunlight.
Do not freeze.

Requirements for storage rooms and vessels:
Do not allow to enter into surface water or drains.

Further information on storage conditions:
Can be stored for at least 6 months if stored under the correct conditions.

7.3. Specific end use(s)
No data available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1. Occupational exposure limit values

Limit value type (country of origin)	Substance name	① Long-term occupational exposure limit value ② Short-term occupational exposure limit value ③ Instantaneous value ④ Monitoring and observation processes ⑤ Remark
DFG (DE) from 1 Jul 2024	**Mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one [EC no. 247-500-7] and2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)** CAS No.: 55965-84-9 EC No.: 911-418-6	① 0.2 mg/m³ ⑤ (einatembare Fraktion) Gemisch aus cas 26172-55 und 2682-20

8.1.2. Biological limit values

No data available

8.1.3. DNEL-/PNEC-values

No data available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

No data available

8.2.2. Personal protection equipment

Eye/face protection:

Eye glasses with side protection EN 166

Skin protection:

Tested protective gloves must be worn EN ISO 374
In the case of wanting to use the gloves again, clean them before taking off and air them well.
Breakthrough times and swelling properties of the material must be taken into consideration. Suitable material: Breakthrough time: min

8.2.3. Environmental exposure controls

No data available

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Physical state: Liquid
Form: Dispersion
Colour: not determined
Odour: not determined
flammability: No data available

Safety relevant basis data

Parameter	Value	at °C	① Method ② Remark
pH	5 – 7		
Melting point	*No data available*		
Freezing point	*No data available*		
Initial boiling point and boiling range	100 °C		
Flash point	*No data available*		
Evaporation rate	*No data available*		
Auto-ignition temperature	*No data available*		
Upper/lower flammability or explosive limits	*No data available*		

Parameter	Value	at °C	① Method ② Remark
Vapour pressure	*No data available*		
Vapour density	*No data available*		
Density	< 1 g/cm³	23 °C	
Bulk density	*not applicable*		
Water solubility	*No data available*		
Dynamic viscosity	*No data available*		
Kinematic viscosity	*No data available*		
Solid content	42 – 44 %		

9.2. Other information
No data available

SECTION 10: Stability and reactivity

10.1. Reactivity
No data available

10.2. Chemical stability
No data available

10.3. Possibility of hazardous reactions
No known hazardous reactions.

10.4. Conditions to avoid
No data available

10.5. Incompatible materials
No data available

10.6. Hazardous decomposition products
No known hazardous decomposition products.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

bronopol CAS No.: 52-51-7 EC No.: 200-143-0
LD_{50} oral: 193 mg/kg (rat)
LD_{50} dermal: >2,000 mg/kg (rat) OECD Guideline 402 (Acute Dermal Toxicity)
LC_{50} Acute inhalation toxicity (dust/mist): >0.12 – <1.14 mg/L 4 h (rat)
sodium nitrate CAS No.: 7631-99-4 EC No.: 231-554-3
LD_{50} oral: ≥1,267 – ≤5,200 mg/kg (rat) OECD Guideline 423 (Acute Oral toxicity - Acute Toxic Class Method)
LD_{50} dermal: >5,000 mg/kg (rat) OECD Guideline 402 (Acute Dermal Toxicity)
Mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one [EC no. 247-500-7] and2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1) CAS No.: 55965-84-9 EC No.: 911-418-6
LD_{50} oral: 66 mg/kg (rat) EPA OPP 81-1 (Acute Oral Toxicity)
LD_{50} dermal: >1,008 mg/kg (rat) EPA OPP 81-2 (Acute Dermal Toxicity)
LC_{50} Acute inhalation toxicity (dust/mist): 0.33 mg/L 4 h (rat) OECD Guideline 403 (Acute Inhalation Toxicity)

Acute oral toxicity:
Based on available data, the classification criteria are not met.

Acute dermal toxicity:
Based on available data, the classification criteria are not met.

Acute inhalation toxicity:
Based on available data, the classification criteria are not met.

Skin corrosion/irritation:
Based on available data, the classification criteria are not met.

Serious eye damage/irritation:
Causes serious eye damage.

Respiratory or skin sensitisation:
Contains Mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6]. (3:1). May produce an allergic reaction.

Germ cell mutagenicity:
Based on available data, the classification criteria are not met.

Carcinogenicity:
Based on available data, the classification criteria are not met.

Reproductive toxicity:
Based on available data, the classification criteria are not met.

STOT-single exposure:
Based on available data, the classification criteria are not met.

STOT-repeated exposure:
Based on available data, the classification criteria are not met.

Aspiration hazard:
Based on available data, the classification criteria are not met.

Additional information:
No data available

11.2. Information on other hazards
No data available

SECTION 12: Ecological information

12.1. Toxicity

bronopol CAS No.: 52-51-7 EC No.: 200-143-0
LC_{50}: 3 mg/L 4 d (Regenbogenforelle) OECD 203
LC_{50}: 11 mg/L 4 d (fish, Lepomis macrochirus) OECD Guideline 203 (Fish, Acute Toxicity Test)
EC_{50}: 0.068 mg/L 3 d OECD 201
EC_{50}: 0.026 mg/L 3 d (Algae/water plant, Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)) OECD Guideline 201 (Alga, Growth Inhibition Test)
EC_{50}: 1.4 mg/L 2 d (crustaceans, Daphnia magna) OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
NOEC: 0.0025 mg/L 3 d OECD 201
NOEC: 0.052 mg/L 3 d (Algae/water plant, Skeletonema costatum) OECD Guideline 201 (Alga, Growth Inhibition Test)
NOEC: >20 mg/L 4 d (fish, Lepomis macrochirus) EPA OPP 72-1 (Fish Acute Toxicity Test)
NOEC: 2.61 mg/L 28 d (fish, Oncorhynchus mykiss (previous name: Salmo gairdneri)) OECD Guideline 215 (Fish, Juvenile Growth Test)
NOEC: 0.27 mg/L 21 d (crustaceans, Daphnia magna) OECD Guideline 211 (Daphnia magna Reproduction Test)
LOEC: 0.88 mg/L 21 d (crustaceans, Daphnia magna) OECD Guideline 211 (Daphnia magna Reproduction Test)
sodium nitrate CAS No.: 7631-99-4 EC No.: 231-554-3
EC_{50}: >1,700 mg/L 10 d (Algae/water plant, several benthic diatoms; see results)

Mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one [EC no. 247-500-7] and2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1) CAS No.: 55965-84-9 EC No.: 911-418-6
LC_{50}: 0.0052 mg/L 4 d (Onchorhyncus mykiss) OECD 203
LC_{50}: 0.07 mg/L 14 d (fish, Oncorhynchus mykiss (previous name: Salmo gairdneri)) OECD Guideline 204 (Fish, Prolonged Toxicity Test: 14-day Study)
LC_{50}: 0.282 mg/L 4 d (crustaceans, Americamysis bahia (previous name: Mysidopsis bahia)) EPA OPPTS 850.1035 (Mysid Acute Toxicity Test)
EC_{50}: 0.048 mg/L 3 d (Algae/water plant, Pseudokirchneriella subcapitata) OECD 201
EC_{50}: 0.0063 mg/L 3 d (Algae/water plant, Skeletonema costatum) OECD Guideline 201 (Alga, Growth Inhibition Test)
EC_{50}: 0.099 mg/L 2 d (crustaceans, Daphnia magna) OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
NOEC: 0.00064 mg/L 21 d (crustaceans) OECD 211
NOEC: 0.00049 mg/L 2 d (Algae/water plant, Skeletonema costatum) OECD Guideline 201 (Alga, Growth Inhibition Test)
NOEC: ≥0.0464 mg/L 35 d (fish, Danio rerio (previous name: Brachydanio rerio)) OECD Guideline 210 (Fish, Early-Life Stage Toxicity Test)
NOEC: 0.004 mg/L 21 d (crustaceans, Daphnia magna) OECD Guideline 211 (Daphnia magna Reproduction Test)
LOEC: 0.144 mg/L 28 d (fish, Oncorhynchus mykiss (previous name: Salmo gairdneri)) OECD Guideline 215 (Fish, Juvenile Growth Test)
LOEC: 0.012 mg/L 21 d (crustaceans, Daphnia magna) OECD Guideline 211 (Daphnia magna Reproduction Test)

12.2. Persistence and degradability

bronopol CAS No.: 52-51-7 EC No.: 200-143-0
Biodegradation: Yes, rapidly
Mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one [EC no. 247-500-7] and2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1) CAS No.: 55965-84-9 EC No.: 911-418-6
Biodegradation: Yes, rapidly

12.3. Bioaccumulative potential

bronopol CAS No.: 52-51-7 EC No.: 200-143-0
Log K_{OW}: 107
Bioconcentration factor (BCF): 3.16
Mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one [EC no. 247-500-7] and2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1) CAS No.: 55965-84-9 EC No.: 911-418-6
Log K_{OW}: 117
Bioconcentration factor (BCF): 3.16

12.4. Mobility in soil

No data available

12.5. Results of PBT and vPvB assessment

Alcohols, C11-14-iso-, C13-rich, ethoxylated CAS No.: 78330-21-9
Results of PBT and vPvB assessment: —
bronopol CAS No.: 52-51-7 EC No.: 200-143-0
Results of PBT and vPvB assessment: This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.
sodium nitrate CAS No.: 7631-99-4 EC No.: 231-554-3
Results of PBT and vPvB assessment: This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.
Mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one [EC no. 247-500-7] and2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1) CAS No.: 55965-84-9 EC No.: 911-418-6
Results of PBT and vPvB assessment: —

12.6. Endocrine disrupting properties

No data available

12.7. Other adverse effects

No data available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment options

Appropriate disposal / Product:

Consult the appropriate local waste disposal expert about waste disposal.

SECTION 14: Transport information

Land transport (ADR/RID)	Inland waterway craft (ADN)	Sea transport (IMDG)	Air transport (ICAO-TI / IATA-DGR)
14.1. UN number or ID number			
No dangerous good in sense of these transport regulations.	No dangerous good in sense of these transport regulations.	No dangerous good in sense of these transport regulations.	No dangerous good in sense of these transport regulations.
14.2. UN proper shipping name			
No dangerous good in sense of these transport regulations.	No dangerous good in sense of these transport regulations.	No dangerous good in sense of these transport regulations.	No dangerous good in sense of these transport regulations.
14.3. Transport hazard class(es)			
not relevant	not relevant	not relevant	not relevant
14.4. Packing group			
not relevant	not relevant	not relevant	not relevant
14.5. Environmental hazards			
not relevant	not relevant	not relevant	not relevant
14.6. Special precautions for user			
not relevant	not relevant	not relevant	not relevant

14.7. Maritime transport in bulk according to IMO instruments

No data available

SECTION 15: Regulatory information

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

15.1.1. EU legislation

Authorisations:

This product has been tested according to OECD 301 B and is readily biodegradable.
It therefore meets the requirements for exemptions under Regulation (EU) 2023/2055 (‘Microplastics Regulation’) and is not subject to the restrictions under REACH Annex XVII Entry 78.

15.1.2. National regulations

[DE] National regulations

Water hazard class

WGK:

1 - slightly hazardous to water

15.2. Chemical Safety Assessment

No data available

SECTION 16: Other information

16.1. Indication of changes

No data available

16.2. Abbreviations and acronyms

ACGIH American Conference of Governmental Industrial Hygienists

ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
BCF	Bioconcentration Factor
CAS	Chemical Abstracts Service
CLP	Classification, Labelling and Packaging
DIN	German Institute for Standardization / German Industrial Standard
DNEL	derived no-effect level
EC_{50}	Effective Concentration 50%
EN	European Standard
ES	Exposure scenario
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods
IMO	International Maritime Organization
LC_{50}	Lethal (fatal) Concentration 50%
LD_{50}	Lethal (fatal) Dose 50%
MAK	Maximum concentration in the workplace air (CH)
NFPA	National Fire Protection Association
NIOSH	National Institute for Occupational Safety & Health
NOEC	No Observed Effect Concentration
OECD	Organisation for Economic Cooperation and Development
PBT	persistent and bioaccumulative and toxic
PNEC	Predicted No Effect Concentration
REACH	Registration, Evaluation and Authorization of Chemicals
RID	Dangerous goods regulations for transport by rail
SCL	Specific concentration limit
UN	United Nations

16.3. Key literature references and sources for data

Substance name	Type	source of supply
bronopol CAS No.: 52-51-7 EC No.: 200-143-0	LD_{50} oral; LD_{50} dermal; LC_{50} Acute inhalation toxicity (dust/mist); LC_{50}; EC_{50}; NOEC; LOEC	Source: European Chemicals Agency, http://echa.europa.eu/
sodium nitrate CAS No.: 7631-99-4 EC No.: 231-554-3	LD_{50} oral; LD_{50} dermal; EC_{50}	Source: European Chemicals Agency, http://echa.europa.eu/
Mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one [EC no. 247-500-7] and2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1) CAS No.: 55965-84-9 EC No.: 911-418-6	LD_{50} oral; LD_{50} dermal; LC_{50} Acute inhalation toxicity (dust/mist); LC_{50}; EC_{50}; NOEC; LOEC	Source: European Chemicals Agency, http://echa.europa.eu/

16.4. Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]

Hazard classes and hazard categories	Hazard statements	Classification procedure
Serious eye damage/eye irritation *(Eye Dam. 1)*	H318: Causes serious eye damage.	Calculation method.

16.5. List of relevant hazard statements and/or precautionary statements from sections 2 to 15

Hazard statements	
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H310	Fatal in contact with skin.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.

Hazard statements	
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H335	May cause respiratory irritation.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Supplemental hazard information	
EUH071	Corrosive to the respiratory tract.

16.6. Training advice
No data available

16.7. Additional information
No data available