

SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of:
Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008



Revision date: 06-Jun-2023

Revision Number: 1.01

Print Date: 07-Jun-2023

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

1.1. Product identifier

Product Name: **B 1200**
Usage: cleaning concentrate
Article number: 00013210

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

Product categories [PC]: PC35 - Washing and cleaning products (including solvent based products)
Sector of uses [SU]: SU3 - Industrial uses: Uses of substances as such or in preparations at industrial sites
Environmental release categories [ERC]: ERC4 - Industrial use of processing aids in processes and products, not becoming part of articles

1.3. Details of the supplier of the safety data sheet

Supplier: ph-cleantec
Gutenbergstr. 14
D – 70736 Fellbach
Telefon: +49-711-518 0600
Telefax: +49-711-518 0994
www.ph-cleantec.de

E-mail address info@ph-cleantec.de

1.4. Emergency telephone number

Emergency Telephone: Notrufnummer

Emergency Telephone - §45 - (EC)1272/2008	
Europe	112
Austria	+43 1 406 43 43 (Giftinformationszentrale)
Slovakia	+421 2 5477 4166 (NTIC)
Hungary	+36 80 201 199; +36 1 476 6464 (ETTSZ)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Skin corrosion/irritation	Category 2 - (H315)
Serious eye damage/eye irritation	Category 1 - (H318)
Chronic aquatic toxicity	Category 3 - (H412)

2.2. Label elements

SAFETY DATA SHEET

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Revision Number: 1.01



Signal word: **Danger**

Hazard components for labeling:

Contains Poly(oxy-1,2-ethanediyl), .alpha.-tridecyl-.omega.-hydroxy-, branched (> 2.5 EO), Ethanolamine, Poly(oxy-1,2-ethanediyl), .alpha.-sulfo-.omega.-hydroxy-, C12-14-alkyl ethers, sodium salts (1 - 2.5 EO), Sodium mercaptobenzothiazole

Hazard statements:

H315 - Causes skin irritation.

H318 - Causes serious eye damage.

H412 - Harmful to aquatic life with long lasting effects.

EU Specific Hazard Statements:

EUH208 - Contains Orange, sweet, extract, D-Limonene May produce an allergic reaction.

Precautionary Statements - EU (§28, 1272/2008):

P264 - Wash face, hands and any exposed skin thoroughly after handling

P273 - Avoid release to the environment

P280 - Wear protective gloves and eye/face protection

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 or doctor

2.3. Other hazards

Harmful to aquatic life.

PBT & vPvB: This mixture contains no substance considered to be persistent, bioaccumulating nor toxic (PBT). This mixture contains no substance considered to be very persistent nor very bioaccumulating (vPvB).

Endocrine Disruptor Information: No information available

SECTION 3: Composition/information on ingredients

aqueous mild alkaline solution, surfactants, additives, low-salt

3.1 Substances

Not applicable

3.2 Mixtures

Chemical name	CAS No	EC No (EU Index No)	REACH registration number	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Weight-%
Diethylene glycol monobutyl ether	112-34-5	203-961-6	01-2119475104-44	Eye Irrit. 2 (H319)	5 - < 10
Poly(oxy-1,2-ethanediyl), .alpha.-tridecyl-.omega.-hydroxy-, branched (> 2.5 EO)	69011-36-5	931-138-8	[7]	Acute Tox. 4 (H302) Eye Dam. 1 (H318)	5 - < 10
Alcohols, C12-14, ethoxylated	68439-51-0	-	[7]	Aquatic Chronic 3	3 - < 5

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propoxylated				(H412)	
Ethanolamine	141-43-5	205-483-3	01-2119486455-28	Acute Tox. 4 (H302) Acute Tox. 4 (H312) Skin Corr. 1B (H314) Eye Dam. 1 (H318) Acute Tox. 4 (H332) STOT SE 3 (H335) Aquatic Chronic 3 (H412)	1 - < 3
Poly(oxy-1,2-ethanediyl), .alpha.-sulfo-.omega.-hydroxy-, C12-14-alkyl ethers, sodium salts (1 - 2.5 EO)	68891-38-3	500-234-8	01-2119488639-16	Skin Irrit. 2 (H315) Eye Dam. 1 (H318) Aquatic Chronic 3 (H412)	1 - < 3
Orange, sweet, extract	8028-48-6	232-433-8	01-2119493353-35	Flam. Liq. 3 (H226) Asp. Tox. 1 (H304) Skin Irrit. 2 (H315) Skin Sens. 1 (H317) Aquatic Chronic 2 (H411)	0.5 - < 1
Sodium mercaptobenzothiazole	2492-26-4	219-660-8	01-2119493018-35	Met. Corr. 1 (H290) Skin Corr. 1B (H314) Skin Sens. 1 (H317) Eye Dam. 1 (H318) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)	0.25 - < 0.5
Boric acid (H3BO3)	10043-35-3	(005-007-00-2) 233-139-2	01-2119486683-25	Repr. 1B (H360FD)	0.1 - < 0.25

NOTE [7] - No registration number is given for this substance because it is a polymer exempted from registration according to the provisions of Article 2(9) of REACH. All monomers or other substances within the polymer are registered or exempt from registration

Chemical name	Specific concentration limit (SCL)	M-Factor	M-Factor (long-term)	Notes
Ethanolamine 141-43-5	STOT SE 3 :: C>=5%			

Acute Toxicity Estimate:

If LD50/LC50 data is not available or does not correspond to the classification category, then the appropriate conversion value from CLP Annex I, Table 3.1.2, is used to calculate the acute toxicity estimate (ATEmix) for classifying a mixture based on its components

Chemical name	Oral LD50 mg/kg	Dermal LD50 mg/kg	Inhalation LC50 - 4 hour - dust/mist - mg/L	Inhalation LC50 - 4 hour - vapor - mg/L	Inhalation LC50 - 4 hour - gas - ppm
Diethylene glycol monobutyl ether 112-34-5	3384	2764	No data available	No data available	No data available
Poly(oxy-1,2-ethanediyl), .alpha.-tridecyl-.omega.-hydroxy-, branched (> 2.5 EO) 69011-36-5	500	5960	No data available	No data available	No data available
Alcohols, C12-14, ethoxylated propoxylated 68439-51-0	3530	No data available	No data available	No data available	No data available
Ethanolamine	1089	2504	No data available	11	No data available

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1907/2006 and Regulation (EC) No. 1272/2008

Revision date: 06-Jun-2023

Print Date: 07-Jun-2023

Revision Number: 1.01

141-43-5					
Poly(oxy-1,2-ethanediyl), .alpha.-sulfo-.omega.-hydroxy-, C12-14-alkyl ethers, sodium salts (1 - 2.5 EO) 68891-38-3	2870	2001	No data available	No data available	No data available
Orange, sweet, extract 8028-48-6	5005	5005	No data available	No data available	No data available
Sodium mercaptobenzothiazole 2492-26-4	1476	7940	No data available	No data available	No data available
Boric acid (H3BO3) 10043-35-3	2660	2002	0.1602	No data available	No data available

This product contains one or more candidate substance(s) of very high concern (Regulation (EC) No. 1907/2006 (REACH), Article 59)

Chemical name	CAS No	SVHC candidates
Boric acid (H3BO3)	10043-35-3	X

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

SECTION 4: First aid measures

4.1. Description of first aid measures

General advice:	Immediate medical attention is required. Show this safety data sheet to the doctor in attendance.
Inhalation:	Remove to fresh air. Get medical attention immediately if symptoms occur.
Eye contact:	Get immediate medical attention. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area.
Skin contact:	Wash off immediately with soap and plenty of water for at least 15 minutes. Get medical attention if irritation develops and persists.
Ingestion:	Rinse mouth. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Call a physician.
Self-protection of the first aider:	Avoid contact with skin, eyes or clothing. Wear personal protective clothing (see section 8).

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

Symptoms	Burning sensation.
Effects of Exposure	No information available.

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

Note to physicians:	Treat symptomatically.
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SECTION 5: Firefighting measures

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Revision Number: 1.01

5.1. Extinguishing media

Suitable Extinguishing Media: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Large Fire: CAUTION: Use of water spray when fighting fire may be inefficient.

Unsuitable extinguishing media: Do not scatter spilled material with high pressure water streams.

5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the chemical: No information available.

5.3. Advice for firefighters

Special protective equipment and precautions for fire-fighters: Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions: Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. Ensure adequate ventilation.

Other information: Refer to protective measures listed in Sections 7 and 8.

For emergency responders: Use personal protection recommended in Section 8.

6.2. Environmental precautions

Environmental precautions: Prevent further leakage or spillage if safe to do so.

6.3. Methods and material for containment and cleaning up

Methods for containment: Prevent further leakage or spillage if safe to do so.

Methods for cleaning up: Take up mechanically, placing in appropriate containers for disposal.

Prevention of secondary hazards: Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections

Reference to other sections: See section 8 for more information. See section 13 for more information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

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Revision date: 06-Jun-2023

Print Date: 07-Jun-2023

Revision Number: 1.01



Advice on safe handling: Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse.

General hygiene considerations: Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions: Keep containers tightly closed in a dry, cool and well-ventilated place. Store locked up. Keep out of the reach of children.

7.3. Specific end use(s)

Other information: No information available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure Limits:

Chemical name	European Union	Austria	Belgium	Bulgaria	Croatia
Diethylene glycol monobutyl ether 112-34-5	TWA: 10 ppm TWA: 67.5 mg/m ³	TWA: 10 ppm TWA: 67.5 mg/m ³ STEL 15 ppm STEL 101.2 mg/m ³	TWA: 10 ppm TWA: 67.5 mg/m ³ STEL: 15 ppm STEL: 101.2 mg/m ³	STEL: 15 ppm STEL: 101.2 mg/m ³ TWA: 10 ppm TWA: 67.5 mg/m ³	TWA: 10 ppm TWA: 67.5 mg/m ³ STEL: 15 ppm STEL: 101.2 mg/m ³
Ethanolamine 141-43-5	TWA: 1 ppm TWA: 2.5 mg/m ³ *	TWA: 1 ppm TWA: 2.5 mg/m ³ STEL 3 ppm STEL 7.6 mg/m ³ Sh+	TWA: 1 ppm TWA: 2.5 mg/m ³ STEL: 3 ppm STEL: 7.6 mg/m ³ D*	STEL: 3 ppm STEL: 7.6 mg/m ³ TWA: 1 ppm TWA: 2.5 mg/m ³ K*	TWA: 1 ppm TWA: 2.5 mg/m ³ STEL: 3 ppm STEL: 7.6 mg/m ³ *
Boric acid (H3BO3) 10043-35-3			TWA: 2 mg/m ³ STEL: 6 mg/m ³	TWA: 5.0 mg/m ³	
Chemical name	Cyprus	Czech Republic	Denmark	Estonia	Finland
Diethylene glycol monobutyl ether 112-34-5	STEL: 15 ppm STEL: 101.2 mg/m ³ TWA: 10 ppm TWA: 67.5 mg/m ³	TWA: 100 mg/m ³ Ceiling: 100 mg/m ³	TWA: 10 ppm TWA: 68 mg/m ³	TWA: 10 ppm TWA: 67.5 mg/m ³	TWA: 10 ppm TWA: 68 mg/m ³
Ethanolamine 141-43-5	* STEL: 3 ppm STEL: 7.6 mg/m ³ TWA: 1 ppm TWA: 2.5 mg/m ³	TWA: 2.5 mg/m ³ Ceiling: 7.5 mg/m ³ D*	TWA: 1 ppm TWA: 2.5 mg/m ³ H*	TWA: 1 ppm TWA: 2.5 mg/m ³ STEL: 3 ppm STEL: 7.6 mg/m ³ A*	TWA: 1 ppm TWA: 2.5 mg/m ³ STEL: 3 ppm STEL: 7.6 mg/m ³ iho*
Chemical name	France	Germany TRGS	Germany DFG	Greece	Hungary
Diethylene glycol monobutyl ether 112-34-5	TWA: 10 ppm TWA: 68 mg/m ³ STEL: 15 ppm STEL: 101.2 mg/m ³	TWA: 10 ppm TWA: 67 mg/m ³	TWA: 67 mg/m ³ TWA: 10 ppm Peak: 15 ppm Peak: 100.5 mg/m ³	TWA: 10 ppm TWA: 67.5 mg/m ³ STEL: 15 ppm STEL: 101.2 mg/m ³	TWA: 67.5 mg/m ³ STEL: 101.2 mg/m ³
Ethanolamine 141-43-5	TWA: 1 ppm TWA: 2.5 mg/m ³ STEL: 3 ppm STEL: 7.6 mg/m ³ *	TWA: 0.2 ppm TWA: 0.5 mg/m ³ Sh+ H* Skin sensitizer	TWA: 0.2 ppm TWA: 0.51 mg/m ³ Peak: 0.2 ppm Peak: 0.51 mg/m ³ skin sensitizer	TWA: 1 ppm TWA: 2.5 mg/m ³ STEL: 3 ppm STEL: 7.6 mg/m ³ *	TWA: 2.5 mg/m ³ STEL: 7.6 mg/m ³ b*
Boric acid (H3BO3) 10043-35-3		TWA: 0.5 mg/m ³	TWA: 10 mg/m ³ Peak: 10 mg/m ³		

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Chemical name	Ireland	Italy MDLPS	Italy AIDII	Latvia	Lithuania
Diethylene glycol monobutyl ether 112-34-5	TWA: 10 ppm TWA: 67.5 mg/m ³ STEL: 15 ppm STEL: 101.2 mg/m ³	TWA: 10 ppm TWA: 67.5 mg/m ³ STEL: 15 ppm STEL: 101.2 mg/m ³	TWA: 10 ppm TWA: 66 mg/m ³	TWA: 10 ppm TWA: 67.5 mg/m ³ STEL: 15 ppm STEL: 101.2 mg/m ³	TWA: 67.5 mg/m ³ TWA: 10 ppm STEL: 101.2 mg/m ³ STEL: 15 ppm
Ethanolamine 141-43-5	TWA: 1 ppm TWA: 2.5 mg/m ³ STEL: 3 ppm STEL: 7.6 mg/m ³ Sk*	TWA: 1 ppm TWA: 2.5 mg/m ³ STEL: 3 ppm STEL: 7.6 mg/m ³ cute*	TWA: 3 ppm TWA: 7.5 mg/m ³ STEL: 6 ppm STEL: 15 mg/m ³	TWA: 0.2 ppm TWA: 0.5 mg/m ³ STEL: 3 ppm STEL: 7.6 mg/m ³ Ada*	O* TWA: 2.5 mg/m ³ TWA: 1 ppm STEL: 7.6 mg/m ³ STEL: 3 ppm
Boric acid (H3BO3) 10043-35-3	TWA: 2 mg/m ³ STEL: 6 mg/m ³		TWA: 2 mg/m ³ STEL: 6 mg/m ³	TWA: 10 mg/m ³	TWA: 10 mg/m ³
Chemical name	Luxembourg	Malta	Netherlands	Norway	Poland
Diethylene glycol monobutyl ether 112-34-5	Peau* STEL: 15 ppm STEL: 101.2 mg/m ³ TWA: 10 ppm TWA: 67.5 mg/m ³	STEL: 15 ppm STEL: 101.2 mg/m ³ TWA: 10 ppm TWA: 67.5 mg/m ³	TWA: 50 mg/m ³ STEL: 100 mg/m ³ H*	TWA: 10 ppm TWA: 68 mg/m ³ STEL: 20 ppm STEL: 102 mg/m ³	STEL: 100 mg/m ³ TWA: 67 mg/m ³
Ethanolamine 141-43-5	Peau* STEL: 3 ppm STEL: 7.6 mg/m ³ TWA: 1 ppm TWA: 2.5 mg/m ³	skin* STEL: 3 ppm STEL: 7.6 mg/m ³ TWA: 1 ppm TWA: 2.5 mg/m ³	TWA: 2.5 mg/m ³ STEL: 7.6 mg/m ³ H*	TWA: 1 ppm TWA: 2.5 mg/m ³ STEL: 3 ppm STEL: 5 mg/m ³ H*	STEL: 7.5 mg/m ³ TWA: 2.5 mg/m ³ skóra*
Chemical name	Portugal	Romania	Slovakia	Slovenia	Spain
Diethylene glycol monobutyl ether 112-34-5	TWA: 10 ppm TWA: 67.5 mg/m ³ STEL: 101.2 mg/m ³ STEL: 15 ppm	TWA: 67.5 mg/m ³ TWA: 10 ppm STEL: 15 ppm STEL: 101.2 mg/m ³	TWA: 10 ppm TWA: 67.5 mg/m ³ Ceiling: 101.2 mg/m ³	TWA: 10 ppm TWA: 67.5 mg/m ³ STEL: 15 ppm STEL: 101.2 mg/m ³	TWA: 10 ppm TWA: 67.5 mg/m ³ STEL: 15 ppm STEL: 101.2 mg/m ³
Ethanolamine 141-43-5	TWA: 1 ppm TWA: 2.5 mg/m ³ STEL: 3 ppm STEL: 7.6 mg/m ³ Cutânea*	TWA: 1 ppm TWA: 2.5 mg/m ³ STEL: 3 ppm STEL: 7.6 mg/m ³ P*	TWA: 1 ppm TWA: 2.5 mg/m ³ K* Ceiling: 7.6 mg/m ³	TWA: 1 ppm TWA: 2.5 mg/m ³ STEL: 3 ppm STEL: 7.6 mg/m ³ K*	TWA: 1 ppm TWA: 2.5 mg/m ³ STEL: 3 ppm STEL: 7.5 mg/m ³ via dérmica*
Boric acid (H3BO3) 10043-35-3	TWA: 2 mg/m ³ STEL: 6 mg/m ³			TWA: 0.5 mg/m ³ STEL: 1.0 mg/m ³	TWA: 2 mg/m ³ STEL: 6 mg/m ³
Chemical name	Sweden	Switzerland	United Kingdom	Russia	Turkey
Diethylene glycol monobutyl ether 112-34-5	NGV: 10 ppm NGV: 68 mg/m ³ Bindande KGV: 15 ppm Bindande KGV: 101 mg/m ³	TWA: 10 ppm TWA: 67 mg/m ³ STEL: 15 ppm STEL: 101 mg/m ³	TWA: 10 ppm TWA: 67.5 mg/m ³ STEL: 15 ppm STEL: 101.2 mg/m ³	MAC: 10 mg/m ³	TWA: 10 ppm TWA: 67.5 mg/m ³ STEL: 15 ppm STEL: 101.2 mg/m ³
Ethanolamine 141-43-5	NGV: 1 ppm NGV: 2.5 mg/m ³ Bindande KGV: 3 ppm Bindande KGV: 7.5 mg/m ³ *	S+ TWA: 2 ppm TWA: 5 mg/m ³ STEL: 4 ppm STEL: 10 mg/m ³	TWA: 1 ppm TWA: 2.5 mg/m ³ STEL: 3 ppm STEL: 7.6 mg/m ³ Sk*	MAC: 0.5 mg/m ³ Skin	TWA: 1 ppm TWA: 2.5 mg/m ³ STEL: 3 ppm STEL: 7.6 mg/m ³ S*
Boric acid (H3BO3) 10043-35-3		TWA: 1.8 mg/m ³ STEL: 1.8 mg/m ³		MAC: 10 mg/m ³	

Biological occupational exposure limits:

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies

Derived No Effect Level (DNEL):

component information:

Worker - inhalative:

Chemical name	long-term, systemic	short-term, systemic	long-term, local	short-term, local
Diethylene glycol monobutyl ether	67.5 mg/m ³		67.5 mg/m ³	101.2 mg/m ³
Poly(oxy-1,2-ethanediyl),	294 mg/m ³			

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Revision date: 06-Jun-2023

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Print Date: 07-Jun-2023

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.alpha.-tridecyl-.omega.-hydroxy-, branched (> 2.5 EO)				
Ethanolamine	1 mg/m ³		0.51 mg/m ³	
Poly(oxy-1,2-ethanediyl), .alpha.-sulfo-.omega.-hydroxy-, C12-14-alkyl ethers, sodium salts (1 - 2.5 EO)	175 mg/m ³			
Sodium mercaptobenzothiazole	10 mg/m ³	10 mg/m ³	1 mg/m ³	1 mg/m ³
Boric acid (H3BO3)	8.3 mg/m ³			

Worker - dermal:

Chemical name	long-term, systemic	short-term, systemic	long-term, local	short-term, local
Diethylene glycol monobutyl ether	83 mg/kg bw/day			
Poly(oxy-1,2-ethanediyl), .alpha.-tridecyl-.omega.-hydroxy-, branched (> 2.5 EO)	2080 mg/kg bw/day			
Ethanolamine	3 mg/kg bw/day			
Poly(oxy-1,2-ethanediyl), .alpha.-sulfo-.omega.-hydroxy-, C12-14-alkyl ethers, sodium salts (1 - 2.5 EO)	2750 mg/kg bw/day		132 µg/cm ²	
Sodium mercaptobenzothiazole	2.8 mg/kg bw/day	2.8 mg/kg bw/day		
Boric acid (H3BO3)	392 mg/kg bw/day			

Consumer - inhalative:

Chemical name	long-term, systemic	short-term, systemic	long-term, local	short-term, local
Diethylene glycol monobutyl ether	40.5 mg/m ³		40.5 mg/m ³	60.7 mg/m ³
Poly(oxy-1,2-ethanediyl), .alpha.-tridecyl-.omega.-hydroxy-, branched (> 2.5 EO)	87 mg/m ³			
Ethanolamine	0.18 mg/m ³		0.28 mg/m ³	
Poly(oxy-1,2-ethanediyl), .alpha.-sulfo-.omega.-hydroxy-, C12-14-alkyl ethers, sodium salts (1 - 2.5 EO)	52 mg/m ³			
Sodium mercaptobenzothiazole	2.5 mg/m ³	2.5 mg/m ³	1 mg/m ³	1 mg/m ³
Boric acid (H3BO3)	4.15 mg/m ³			

Consumer - dermal:

Chemical name	long-term, systemic	short-term, systemic	long-term, local	short-term, local
Diethylene glycol monobutyl ether	50 mg/kg bw/day			
Poly(oxy-1,2-ethanediyl), .alpha.-tridecyl-.omega.-	1250 mg/kg bw/day			

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1907/2006 and Regulation (EC) No. 1272/2008

Revision date: 06-Jun-2023

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Chemical name	long-term, systemic	short-term, systemic	long-term, local	short-term, local
hydroxy-, branched (> 2.5 EO)				
Ethanolamine	1.5 mg/kg bw/day			
Poly(oxy-1,2-ethanediyl), .alpha.-sulfo-.omega.-hydroxy-, C12-14-alkyl ethers, sodium salts (1 - 2.5 EO)	1650 mg/kg bw/day		79 µg/cm2	
Sodium mercaptobenzothiazole	1.5 mg/kg bw/day	1.5 mg/kg bw/day		
Boric acid (H3BO3)	196 mg/kg bw/day			

consumer - oral:

Chemical name	long-term, systemic	short-term, systemic	long-term, local	short-term, local
Diethylene glycol monobutyl ether	5 mg/kg bw/day			
Poly(oxy-1,2-ethanediyl), .alpha.-tridecyl-.omega.-hydroxy-, branched (> 2.5 EO)	25 mg/kg bw/day			
Ethanolamine	1.5 mg/kg bw/day			
Poly(oxy-1,2-ethanediyl), .alpha.-sulfo-.omega.-hydroxy-, C12-14-alkyl ethers, sodium salts (1 - 2.5 EO)	15 mg/kg bw/day			
Sodium mercaptobenzothiazole	1.5 mg/kg bw/day	1.5 mg/kg bw/day		
Boric acid (H3BO3)	0.98 mg/kg bw/day	0.98 mg/kg bw/day		

Predicted No Effect Concentration (PNEC):

component information:

Chemical name	Diethylene glycol monobutyl ether CAS: 112-34-5
Freshwater	1.1 mg/L
Marine water	0.11 mg/L
Freshwater (intermittent release)	11 mg/L
Sewage treatment	200 mg/L
Freshwater sediment	4.4 mg/kg sediment dw
Marine sediment	0.44 mg/kg sediment dw
Soil	0.32 mg/kg soil dw
Food chain	56 mg/kg food
Chemical name	Poly(oxy-1,2-ethanediyl), .alpha.-tridecyl-.omega.-hydroxy-, branched (> 2.5 EO) CAS: 69011-36-5
Freshwater	0.074 mg/L
Marine water	0.0074 mg/L
Freshwater (intermittent release)	0.015 mg/L
Sewage treatment	1.4 mg/L
Freshwater sediment	0.604 mg/kg sediment dw
Marine sediment	0.0604 mg/kg sediment dw
Soil	0.1 mg/kg soil dw
Chemical name	Ethanolamine CAS: 141-43-5

SAFETY DATA SHEET

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Revision date: 06-Jun-2023

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Revision Number: 1.01

Freshwater	0.07 mg/L
Marine water	0.007 mg/L
Freshwater (intermittent release)	0.028 mg/L
Sewage treatment	100 mg/L
Freshwater sediment	0.357 mg/kg sediment dw
Marine sediment	0.0357 mg/kg sediment dw
Soil	1.29 mg/kg soil dw
Chemical name	Poly(oxy-1,2-ethanediyl), .alpha.-sulfo-.omega.-hydroxy-, C12-14-alkyl ethers, sodium salts (1 - 2.5 EO) CAS: 68891-38-3
Freshwater	0.24 mg/L
Marine water	0.024 mg/L
Freshwater (intermittent release)	0.071 mg/L
Sewage treatment	10 g/L
Freshwater sediment	0.9168 mg/kg sediment dw
Marine sediment	0.0917 mg/kg sediment dw
Soil	7.5 mg/kg soil dw
Chemical name	Sodium mercaptobenzothiazole CAS: 2492-26-4
Freshwater	0.0041 mg/L
Marine water	0.00041 mg/L
Freshwater (intermittent release)	0.005 mg/L
Sewage treatment	0.3 mg/L
Freshwater sediment	0.147 mg/kg sediment dw
Marine sediment	0.0147 mg/kg sediment dw
Soil	0.027 mg/kg soil dw
Chemical name	Boric acid (H3BO3) CAS: 10043-35-3
Freshwater	2.9 mg/L
Marine water	2.9 mg/L
Freshwater (intermittent release)	13.7 mg/L
Sewage treatment	10 mg/L
Soil	5.7 mg/kg soil dw

8.2. Exposure controls

Engineering controls: None under normal use conditions.

Personal protective equipment: The usual precautionary measures for the handling of chemicals have to be observed.



Eye/face protection: Tight sealing safety goggles.

Hand protection: Wear suitable gloves. Impervious gloves.

PPE - Glove material	Glove thickness	Break through time
Butyl caoutchouc (butyl rubber)	0.5 mm	>=480 min.

Skin and body protection: Wear suitable protective clothing. Long sleeved clothing.

Respiratory protection: No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

Recommended Filter Type: Filtering device (full mask or mouthpiec) with filter: AP-2

SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of: Regulation (EC) No.

1907/2006 and Regulation (EC) No. 1272/2008

Revision date: 06-Jun-2023

Print Date: 07-Jun-2023

Revision Number: 1.01

Environmental exposure controls: No information available.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Liquid				
Color	light yellow				
Odor	characteristic				
				<i>Conditions</i>	<i>Method</i>
Melting point / melting range					<i>Remarks</i>
Boiling point / boiling range	>	100	°C		Not established
Flammability					Not established
Decomposition temperature					not relevant
Flash point					Not established
Autoignition temperature					None known
Lower explosive limit					not relevant
Upper explosion limit					not relevant
Vapor pressure					Not established
Density	~	1.050	g/cm ³	20 °C	
Water solubility					Miscible
pH	~	10.6		20 °C	
pH (as aqueous solution)	~	9.5		20 °C	solution (1 %)
Partition coefficient					Not established
Kinematic viscosity					Not applicable
Odor threshold					Not established
Relative density					Not established
Evaporation rate					Not established
Relative vapor density		no data available			
Particle Size		no data available			
Particle Size Distribution		no data available			

9.2. Other information

Bulk density:	no data available
Softening point	No information available
Molecular weight	No information available

9.2.1. Information with regard to physical hazard classes:

Explosive properties	Not an explosive
Oxidizing properties	Not oxidising.

9.2.2. Other safety characteristics: No information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity: No information available.

SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of: Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

Revision date: 06-Jun-2023

Print Date: 07-Jun-2023

Revision Number: 1.01

10.2. Chemical stability

Stability: Stable under normal conditions.

Explosion data:

Sensitivity to mechanical impact: None.

Sensitivity to static discharge: None.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions: None under normal processing.

10.4. Conditions to avoid

Conditions to avoid: None known based on information supplied.

10.5. Incompatible materials

Incompatible materials: Strong oxidizing agents.

10.6. Hazardous decomposition products

Hazardous decomposition products: None known based on information supplied.

SECTION 11: Toxicological information

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

Information on likely routes of exposure:

Product Information:

Inhalation: Specific test data for the substance or mixture is not available. May cause irritation of respiratory tract.

Eye contact: Specific test data for the substance or mixture is not available. Causes serious eye damage. May cause irreversible damage to eyes.

Skin contact: Specific test data for the substance or mixture is not available. Causes skin irritation. (based on components).

Ingestion: Specific test data for the substance or mixture is not available. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Symptoms related to the physical, chemical and toxicological characteristics:

Symptoms: Redness. Burning. May cause blindness. May cause redness and tearing of the eyes.

Numerical measures of toxicity:

Acute toxicity: The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral): 6,283.10 mg/kg

ATEmix (dermal): 14,592.10 mg/kg

SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of: Regulation (EC) No.

1907/2006 and Regulation (EC) No. 1272/2008

Revision date: 06-Jun-2023

Print Date: 07-Jun-2023

Revision Number: 1.01

ATEmix (inhalation-vapor): 423.10 mg/l

Component Information:

Chemical name	Parameter	Species	Effective dose	Method
Diethylene glycol monobutyl ether 112-34-5	Oral LD50	Rat	3384 mg/kg	OECD 401
Poly(oxy-1,2-ethanediyl), .alpha.- tridecyl-.omega.-hydroxy-, branched (> 2.5 EO) 69011-36-5	Oral LD50	Rat	> 300 - 2000 mg/kg	
Alcohols, C12-14, ethoxylated propoxylated 68439-51-0	Oral LD50	Rat	= 3530 mg/kg	
Ethanolamine 141-43-5	Oral LD50	Rat	1089 mg/kg	OECD 401
Poly(oxy-1,2-ethanediyl), .alpha.- sulfo-.omega.-hydroxy-, C12-14-alkyl ethers, sodium salts (1 - 2.5 EO) 68891-38-3	Oral LD50	Rat	2870 - 4100 mg/kg	
Orange, sweet, extract 8028-48-6	Oral LD50	Rat	> 5000 mg/kg	
Sodium mercaptobenzothiazole 2492-26-4	Oral LD50	Rat	1476 mg/kg	
Boric acid (H3BO3) 10043-35-3	Oral LD50	Rat	2660 mg/kg	

Chemical name	Parameters	Species	Effective dose	Method
Diethylene glycol monobutyl ether 112-34-5	Dermal LD50	Rabbit	2764 mg/kg	OECD 402
Poly(oxy-1,2-ethanediyl), .alpha.- tridecyl-.omega.-hydroxy-, branched (> 2.5 EO) 69011-36-5	Dermal LD50	Rabbit	= 5960 mg/kg	
Ethanolamine 141-43-5	Dermal LD50	Rabbit	2504 mg/kg	OECD 402
Poly(oxy-1,2-ethanediyl), .alpha.- sulfo-.omega.-hydroxy-, C12-14-alkyl ethers, sodium salts (1 - 2.5 EO) 68891-38-3	Dermal LD50	Rat	> 2000 mg/kg	
Orange, sweet, extract 8028-48-6	Dermal LD50	Rabbit	> 5000 mg/kg	
Sodium mercaptobenzothiazole 2492-26-4	Dermal LD50	Rabbit	> 7940 mg/kg	
Boric acid (H3BO3) 10043-35-3	Dermal LD50	Rabbit	> 2000 mg/kg	

Chemical name	Parameters	Species	Effective dose	Exposure time	Method
Poly(oxy-1,2-ethanediyl), .alpha.-tridecyl-.omega.- hydroxy-, branched (> 2.5 EO) 69011-36-5	Inhalation LC50		> 1.6 mg/L	4 h	
Ethanolamine 141-43-5	Inhalation LC50	Rat		6 h	
Sodium mercaptobenzothiazole 2492-26-4	Inhalation LC50	Rat	> 8.2 mg/L	6 h	

SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of: Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

Revision date: 06-Jun-2023

Print Date: 07-Jun-2023

Revision Number: 1.01

Chemical name	Parameters	Species	Effective dose	Exposure time	Method
Boric acid (H3BO3) 10043-35-3	Inhalation LC50	Rat	> 0.16 mg/L	4 h	

Delayed and immediate effects as well as chronic effects from short and long-term exposure:

Skin corrosion/irritation:	Causes skin irritation.
Serious eye damage/eye irritation:	Causes burns. Causes serious eye damage.
Respiratory or skin sensitization:	No information available.
Germ cell mutagenicity:	No information available.
Carcinogenicity:	No information available.
Reproductive toxicity:	Based on available data, the classification criteria are not met.

The table below indicates ingredients above the cut-off threshold considered as relevant which are listed as reproductive toxins.

Chemical name	European Union
Boric acid (H3BO3)	Repr. 1B

STOT - single exposure:	No information available.
STOT - repeated exposure:	No information available.
Aspiration hazard:	No information available.

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

No information available.

11.2.2. Other information

No information available.

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicity: Harmful to aquatic life with long lasting effects.

fish toxicity:

Chemical name	Parameter	Species	Effective dose	Exposure time	Method
Diethylene glycol monobutyl ether 112-34-5	LC50	Lepomis macrochirus	1300 mg/L	96 h	OECD 203

SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of: Regulation (EC) No.

1907/2006 and Regulation (EC) No. 1272/2008

Revision date: 06-Jun-2023

Revision Number: 1.01

Print Date: 07-Jun-2023

Chemical name	Parameter	Species	Effective dose	Exposure time	Method
Poly(oxy-1,2-ethanediyl), .alpha.-tridecyl-.omega.- hydroxy-, branched (> 2.5 EO) 69011-36-5	LC50	Cyprinus carpio	> 1 mg/L	96 h	OECD 203
Ethanolamine 141-43-5	LC50	Pimephales promelas	2070 mg/L	96 h	
Poly(oxy-1,2-ethanediyl), .alpha.-sulfo-.omega.-hydroxy-, C12-14-alkyl ethers, sodium salts (1 - 2.5 EO) 68891-38-3	LC50	Brachydanio rerio	7.1 mg/L	96 h	
Orange, sweet, extract 8028-48-6	LC50	Pimephales promelas	5.65 mg/L	96 h	OECD 203
Sodium mercaptobenzothiazole 2492-26-4	LC50	Oncorhynchus mykiss Lepomis macrochirus	0.3 - 1.1 mg/L 3.8 mg/L	96 h	
Boric acid (H3BO3) 10043-35-3	LC50	Pimephales promelas	456 mg/L	96 h	

toxicity to crustacea:

Chemical name	Parameter	Species	Effective dose	Exposure time	Method
Diethylene glycol monobutyl ether 112-34-5	EC50	Daphnia magna	2850 mg/L	48 h	
Poly(oxy-1,2-ethanediyl), .alpha.-tridecyl-.omega.- hydroxy-, branched (> 2.5 EO) 69011-36-5	EC50	Daphnia magna	1 - 10 mg/L	48 h	OECD 202
Ethanolamine 141-43-5	EC50	Daphnia magna	65 mg/L	48 h	
Poly(oxy-1,2-ethanediyl), .alpha.-sulfo-.omega.-hydroxy-, C12-14-alkyl ethers, sodium salts (1 - 2.5 EO) 68891-38-3	EC50	Daphnia magna	7.3 mg/L	48 h	
Orange, sweet, extract 8028-48-6	EC50	Daphnia magna	1.1 mg/L	48 h	OECD 202
Sodium mercaptobenzothiazole 2492-26-4	EC50	Daphnia magna	1.9 - 5.1 mg/L	48 h	
Boric acid (H3BO3) 10043-35-3	EC50	Daphnia magna	760 mg/L	48 h	

Algae Toxicity:

Chemical name	Parameter	Species	Effective dose	Exposure time	Method
Diethylene glycol monobutyl ether 112-34-5	EC50	Desmodesmus subspicatus	> 100 mg/L	96 h	OECD 201
Poly(oxy-1,2-ethanediyl), .alpha.-tridecyl-.omega.- hydroxy-, branched (> 2.5 EO) 69011-36-5	EC50	Desmodesmus subspicatus	> 1 mg/L	72 h	OECD 201
Ethanolamine 141-43-5	EC50	Desmodesmus subspicatus	15 mg/L	72 h	

SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of: Regulation (EC) No.

1907/2006 and Regulation (EC) No. 1272/2008

Revision date: 06-Jun-2023

Revision Number: 1.01

Print Date: 07-Jun-2023

Chemical name	Parameter	Species	Effective dose	Exposure time	Method
Poly(oxy-1,2-ethanediyl), .alpha.-sulfo-.omega.-hydroxy-, C12-14-alkyl ethers, sodium salts (1 - 2.5 EO) 68891-38-3	Erc50 NOEC	Algae and cyanobacteria	27 mg/L 0.94 mg/L	72 h 3 d	
Orange, sweet, extract 8028-48-6	ErC50	Desmodemus subspicatus	150 mg/L	72 h	OECD 201
Sodium mercaptobenzothiazole 2492-26-4	EC50	Pseudokirchneriella subcapitata	0.3 mg/L	96 h	
Boric acid (H3BO3) 10043-35-3	EC50	Pseudokirchneriella subcapitata	229 mg/L	72 h	

Bacteria toxicity:

Chemical name	Parameters	Species	Effective dose	Exposure time	Method
Ethanolamine 141-43-5	EC50	pseudomonas putida	110 mg/L	16 h	DIN 38412

12.2. Persistence and degradability

Persistence and degradability:

Chemical name	degradation rate	test duration	Rapidly biodegradable	Remarks	Method
Diethylene glycol monobutyl ether 112-34-5	89-93 %	28 d	Yes	Aerobic biological treatment	
Poly(oxy-1,2-ethanediyl), .alpha.-tridecyl-.omega.-hydroxy-, branched (> 2.5 EO) 69011-36-5	> 60 %	28 d	Yes	Aerobic biological treatment	OECD 301 B
Ethanolamine 141-43-5	> 90 %	21 d	Yes	Aerobic biological treatment	
Poly(oxy-1,2-ethanediyl), .alpha.-sulfo-.omega.-hydroxy-, C12-14-alkyl ethers, sodium salts (1 - 2.5 EO) 68891-38-3	> 95 %	28 d	Yes		
Orange, sweet, extract 8028-48-6	72.0 - 83.4 %	28 d	Yes		OECD 301 B

12.3. Bioaccumulative potential

Bioaccumulation:

Chemical name	Partition coefficient	Bioconcentration factor (BCF)
Diethylene glycol monobutyl ether 112-34-5	1	99.9
Ethanolamine 141-43-5	-2.3	> 4
Poly(oxy-1,2-ethanediyl), .alpha.-sulfo-.omega.-hydroxy-, C12-14-alkyl ethers, sodium salts (1 - 2.5 EO)		0.3

SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of: Regulation (EC) No.

1907/2006 and Regulation (EC) No. 1272/2008

Revision date: 06-Jun-2023

Print Date: 07-Jun-2023

Revision Number: 1.01

68891-38-3		
Orange, sweet, extract 8028-48-6	4.38	1.502
Sodium mercaptobenzothiazole 2492-26-4	-0.46	
Boric acid (H3BO3) 10043-35-3	-0.757	0

12.4. Mobility in soil

Mobility in soil: No information available.

Mobility: No information available.

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment: No information available

Chemical name	PBT and vPvB assessment
Diethylene glycol monobutyl ether 112-34-5	The substance is not PBT / vPvB
Poly(oxy-1,2-ethanediyl), .alpha.-tridecyl-.omega.-hydroxy-, branched (> 2.5 EO) 69011-36-5	The substance is not PBT / vPvB
Ethanolamine 141-43-5	The substance is not PBT / vPvB
Poly(oxy-1,2-ethanediyl), .alpha.-sulfo-.omega.-hydroxy-, C12- 14-alkyl ethers, sodium salts (1 - 2.5 EO) 68891-38-3	The substance is not PBT / vPvB
Orange, sweet, extract 8028-48-6	The substance is not PBT / vPvB
Sodium mercaptobenzothiazole 2492-26-4	The substance is not PBT / vPvB
Boric acid (H3BO3) 10043-35-3	The substance is not PBT / vPvB

12.6. Endocrine disrupting properties.

No information available.

12.7. Other adverse effects.

No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste from residues/unused products: Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging: Do not reuse empty containers.

Waste codes / waste designations according to EWC / AVV: 07 06 01* (aqueous washing liquids and mother liquors)

SECTION 14: Transport information

SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of: Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

Revision date: 06-Jun-2023

Print Date: 07-Jun-2023

Revision Number: 1.01

14.1. UN number

ADR:	Not regulated
RID:	Not regulated
IMDG:	Not regulated
IATA:	Not regulated

14.2 UN proper shipping name

ADR:	Not regulated
RID:	Not regulated
IMDG:	Not regulated
IATA:	Not regulated

14.3. Transport hazard class(es)

ADR:	Not regulated
RID:	Not regulated
IMDG:	Not regulated
IATA:	Not regulated

14.4. Packing group

ADR:	Not regulated
RID:	Not regulated
IMDG:	Not regulated
IATA:	Not regulated

14.5. Environmental hazards

ADR:	Not applicable
RID:	Not applicable
IMDG:	Not applicable
IATA:	Not applicable

14.6. Special precautions for user

ADR:	Not regulated
Special Provisions:	None
RID:	Not regulated
Special Provisions:	None
IMDG:	Not regulated
Special Provisions:	None
IATA:	Not regulated
Special Provisions:	None

14.7 Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of: Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

Revision date: 06-Jun-2023

Print Date: 07-Jun-2023

Revision Number: 1.01

mixture

European Union:

Regulation (EC) No. 1907/2006 (Annex II - (EC) No. 2020/878) and Regulation (EC) No. 1272/2008

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

Take note of Directive 94/33/EC on the protection of young people at work:

Check whether measures in accordance with Directive 94/33/EC for the protection of young people at work must be taken

Authorizations and/or restrictions on use:

- This product contains one or more substance(s) subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

Chemical name	Substance subject to authorization per REACH Annex XIV	Restricted substance per REACH Annex XVII
Diethylene glycol monobutyl ether 112-34-5		55. 75.
Boric acid (H3BO3) 10043-35-3		30. 75.

Persistent Organic Pollutants: (EC) 2019/1021 Not applicable

Ozone-depleting substances (ODS) regulation (EC) 1005/2009: Not applicable

EU - Plant Protection Products (1107/2009/EC):

Chemical name	EU - Plant Protection Products (1107/2009/EC)
Orange, sweet, extract 8028-48-6	Member States shall pay particular attention to: (a) the protection of operators and workers; (b) the risk to birds and mammals (details in Commission Implementing Regulation 2020/2007/EU, listed under part B, Orange oil); Conditions of use shall include, where appropriate, risk mitigation measures (details in Commission Implementing Regulation 2020/2007/EU, listed under part B, Orange oil); The applicant shall submit confirmatory information as regards (1) the metabolite fate of orange oil and the route and rate of degradation in soil; (2) the validation of endpoints used in the ecotoxicological risk assessment. The applicant shall submit that information to the Commission, Member States and the Authority by April 30, 2016 (details in Commission Implementing Regulation 2020/2007/EU, listed under part B, Orange oil)

Biocidal Products Regulation (EU) No 528/2012 (BPR):

Chemical name	Biocidal Products Regulation (EU) No 528/2012 (BPR)
Boric acid (H3BO3) 10043-35-3	Product type 8 (details in Commission Implementing Decision 2017/2334/EU) 8 - Wood preservatives

volatile organic compounds (VOC) content:

acc. reg. 2010/75/EG:

2.9 %

SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of: Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

Revision date: 06-Jun-2023

Print Date: 07-Jun-2023

Revision Number: 1.01

acc. reg. 2004/42/EG (Decopaint): 8.4 %

648/2004/ EU (DetVo):

The surfactants contained in this preparation comply with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents.

< 5% Anionic surfactants; Disinfectant; Fragrances; ≥ 5 - < 15% Non-ionic surfactants; < 5% Phosphonates

National regulations:

Denmark:

Chemical name	Denmark - MAL
Diethylene glycol monobutyl ether 112-34-5	0 m3/10 g substance MAL factor ≥10.0 % by weight [3]
Ethanolamine 141-43-5	500 m3/10 g substance MAL factor ≥2.0 - 10.0 % by weight [2] ≥10.0 % by weight [3]
Boric acid (H3BO3) 10043-35-3	0 m3/10 g substance MAL factor ≥0.2 % by weight [3]

Germany:

Water hazard class (WGK): obviously hazardous to water (WGK 2) - Classification according to AwSV

Chemical name	WGK Classification (AwSV)	ID number
Diethylene glycol monobutyl ether 112-34-5	1	46
Poly(oxy-1,2-ethanediyl), .alpha.-tridecyl-.omega.-hydroxy-, branched (> 2.5 EO) 69011-36-5	1	9171
Alcohols, C12-14, ethoxylated propoxylated 68439-51-0	2	672
Ethanolamine 141-43-5	2	94
Poly(oxy-1,2-ethanediyl), .alpha.-sulfo-.omega.-hydroxy-, C12-14-alkyl ethers, sodium salts (1 - 2.5 EO) 68891-38-3	1	8919
Orange, sweet, extract 8028-48-6	3	3824
Sodium mercaptobenzothiazole 2492-26-4	2	7529
Boric acid (H3BO3) 10043-35-3	1	315

TA Luft (German Air Pollution Control Regulation):

org. substances (Ziffer 5.2.5): 10 - 15%

org. subst. dust (digit 5.2.5): < 5%

org. subst. (digit 5.2.5) class I: < 5%

reptox. subst. (Digit 5.2.7.1.3): < 5%

Storage class (TRGS 510): LGK12 - Non-combustible liquids

France:

Occupational Illnesses (R-463-3, France):

SAFETY DATA SHEET



This safety data sheet was created pursuant to the requirements of: Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

Revision date: 06-Jun-2023

Revision Number: 1.01

Print Date: 07-Jun-2023

Chemical name	French RG number
Diethylene glycol monobutyl ether 112-34-5	RG 84
Ethanolamine 141-43-5	RG 49, RG 49bis

RG 49 - Skin conditions caused by aliphatic or alicyclic amines or ethanolamines

RG 49bis - Respiratory conditions caused by aliphatic amines, ethanolamines, or isophorone diamine

RG 84 - Conditions caused by occupational use of liquid organic solvents

Netherlands:

Chemical name	Boric acid (H3BO3)
Netherlands - List of Reproductive Toxins	Fertility Category 1B Development Category 1B
ZZS list: SVHC	x ()

Water contaminating class (Netherlands): Z1

Austria:

Flammable Liquids Regulations, VbF: Not regulated

Poland:

Ordinance of the Minister of Family, Labor and Social Policy dated June 12, 2018 on the highest permissible concentrations and intensities of harmful factors for health in the work environment (Dz. U. 2018 item 1286, as amended)

Act of December 14, 2012 on waste (Journal of Laws of 2013, item 21; as amended)

Act on chemical substances and their mixtures of February 25, 2011. (Journal of Laws No. 63, item 322; as amended)

Regulation of the Minister of Labor and Social Policy of September 26, 1997 on general regulations of safety and hygiene at work (Dz. U. of 2003, No. 169, item 1650; as amended).

Switzerland:

VOC content:: acc. VOCV CH 814.018, att. 1: 6 %

Hungary:

Decree No 44/2000 (XII.27.) of the Ministry of Economic Affairs and Labour of the Republic of Hungary on certain procedures and activities Joint Decree No. 5/2020 ITM on Chemical Safety at Work 178/2017 (VII. 5.)

Government Decree on the European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR) „A“ and „B“ of the European Agreement on Road Transport

International Inventories:

TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Does not comply
ENCS	Does not comply
IECSC	Complies
KECL	Does not comply
PICCS	Does not comply
AICS	Does not comply
NZIoC	Does not comply

Legend:

SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of: Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

Revision date: 06-Jun-2023

Print Date: 07-Jun-2023

Revision Number: 1.01

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
NZIoC - New Zealand Inventory of Chemicals
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

15.2. Chemical safety assessment

Chemical Safety Report: No information available

SECTION 16: Other information

Key or legend to abbreviations and acronyms used in the safety data sheet:

Full text of H-Statements referred to under section 3:

H226 - Flammable liquid and vapor
H290 - May be corrosive to metals
H302 - Harmful if swallowed
H304 - May be fatal if swallowed and enters airways
H312 - Harmful in contact with skin
H314 - Causes severe skin burns and eye damage
H315 - Causes skin irritation
H317 - May cause an allergic skin reaction
H318 - Causes serious eye damage
H319 - Causes serious eye irritation
H332 - Harmful if inhaled
H335 - May cause respiratory irritation
H360FD - May damage fertility. May damage the unborn child
H400 - Very toxic to aquatic life
H410 - Very toxic to aquatic life with long lasting effects
H411 - Toxic to aquatic life with long lasting effects
H412 - Harmful to aquatic life with long lasting effects

Legend:

ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
(Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures)
ADR: European agreement concerning the international carriage of dangerous goods by road
(Accord européen relatif transport des marchandises dangereuses par route)
AGW: Occupational threshold limit value (Arbeitsplatzgrenzwert – Germany)
BCF: Bio-Concentration Factor
BOD(5): Biochemical oxygen demand (within 5 days)
CAS: Chemical Abstract Service
CLP: Classification, Labelling and Packaging
CMR: Carcinogenic, Mutagenic, toxic for Reproduction
DIN: German Standards Institute / German industrial norm
DNEL: Derived No Effect Level
DOC: Dissolved organic carbon
EAK/ AVV: European waste catalogue/ waste directory-regulation
EC50: Effective Concentration 50%
ECHA: European Chemical Agency
EINECS: European Inventory of Existing Commercial Chemical Substances
GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals

SAFETY DATA SHEET



This safety data sheet was created pursuant to the requirements of: Regulation (EC) No.

1907/2006 and Regulation (EC) No. 1272/2008

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IATA: International Air Transport Association
IC50: Inhibition Concentration 50%
IMDG: International Maritime Dangerous Goods Code
LC50: Lethal Concentration 50% - LD50: Lethal dose 50%
MAK: Treshold limit values Germany
NLP: No Longer Polymers
NOAEC: No Observed Adverse Effect Concentration
NOAEL: No Observed Adverse Effect Level
OECD: Organization for Economic Cooperation and Development
PBT: persistent, bioaccumulative, toxic
PC: Product category
PNEC: Predicted No Effect Concentration
REACH: Registration, Evaluation and Authorization of Chemicals
RID: Regulations concerning the international carriage of dangerous goods by rail
(Règlement International concernant le transport de marchandises dangereuses par chemin de fer)
STEL: Short-term Exposure Limit
STP: Sewage treatment plant
SVHC: Substance of Very High Concern
TLV: Threshold Limit Value
TWA: Time Weighted Average
UN: United Nations
VOC: Volatile Organic Compounds
vPvB: very persistent, very bioaccumulative

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Ceiling: Maximum limit value

* Skin designation

Classification procedure	
Classification according to Regulation (EC) No. 1272/2008 [CLP]	Method Used
Acute oral toxicity	Calculation method
Acute dermal toxicity	Calculation method
Acute inhalation toxicity - gas	Calculation method
Acute inhalation toxicity - vapor	Calculation method
Acute inhalation toxicity - dust/mist	Calculation method
Skin corrosion/irritation	Calculation method
Serious eye damage/eye irritation	Calculation method
Respiratory sensitization	Calculation method
Skin sensitization	Calculation method
Mutagenicity	Calculation method
Carcinogenicity	Calculation method
Reproductive toxicity	Calculation method
STOT - single exposure	Calculation method
STOT - repeated exposure	Calculation method
Acute aquatic toxicity	Calculation method
Chronic aquatic toxicity	Calculation method
Aspiration hazard	Calculation method
Ozone	Calculation method

Key literature references and sources for data used to compile the SDS:

European Chemicals Agency (ECHA)

Agency for Toxic Substances and Disease Registry (ATSDR)

U.S. Environmental Protection Agency ChemView Database

European Food Safety Authority (EFSA)

EPA (Environmental Protection Agency)

Acute Exposure Guideline Level(s) (AEGl(s))

U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act

U.S. Environmental Protection Agency High Production Volume Chemicals

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Food Research Journal
Hazardous Substance Database
International Uniform Chemical Information Database (IUCLID)
Japan GHS Classification
Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
NIOSH (National Institute for Occupational Safety and Health)
National Library of Medicine's ChemID Plus (NLM CIP)
National Library of Medicine's PubMed database (NLM PUBMED)
National Toxicology Program (NTP)
New Zealand's Chemical Classification and Information Database (CCID)
Organization for Economic Co-operation and Development Environment, Health, and Safety Publications
Organization for Economic Co-operation and Development High Production Volume Chemicals Program
Organization for Economic Co-operation and Development Screening Information Data Set
RTECS (Registry of Toxic Effects of Chemical Substances)
World Health Organization

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Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH):

Disclaimer:

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End of Safety Data Sheet