

according to Regulation (EC) No 1907/2006

BriteGuard Surface SEALER X

Revision date: 30.01.2020

Product code: BO5825000

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SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

BriteGuard Surface SEALER X

Further trade names

BO 5820500, 500 ml

BO 5825000, 5 l

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

Solvent-borne coatings

1.3. Details of the supplier of the safety data sheet

Company name:	BOHLE AG	
Street:	Dieselstr. 10	
Place:	D-42781 Haan	
Telephone:	+49 2129 5568-0	Telefax: +49 2129 5568-282
e-mail:	info@bohle.de	
Contact person:	Klaus Nehren	Telephone: +49 2129 5568-276
e-mail:	MSDS@bohle.de	
Internet:	www.bohle.com	
Responsible Department:	Chemie	

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture****Regulation (EC) No. 1272/2008**

Hazard categories:

Flammable liquid: Flam. Liq. 2

Aspiration hazard: Asp. Tox. 1

Skin corrosion/irritation: Skin Irrit. 2

Serious eye damage/eye irritation: Eye Irrit. 2

Reproductive toxicity: Repr. 2

Specific target organ toxicity - single exposure: STOT SE 3

Hazardous to the aquatic environment: Aquatic Chronic 2

Hazard Statements:

Highly flammable liquid and vapour.

May be fatal if swallowed and enters airways.

Causes skin irritation.

Causes serious eye irritation.

Suspected of damaging fertility.

May cause drowsiness or dizziness.

Toxic to aquatic life with long lasting effects.

2.2. Label elements**Regulation (EC) No. 1272/2008****Hazard components for labelling**

propan-2-ol; isopropyl alcohol; isopropanol

Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane

octamethylcyclotetrasiloxane

n-hexane

Signal word: Danger

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Pictograms:**Hazard statements**

H225	Highly flammable liquid and vapour.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H361f	Suspected of damaging fertility.
H336	May cause drowsiness or dizziness.
H304	May be fatal if swallowed and enters airways.
H411	Toxic to aquatic life with long lasting effects.

Precautionary statements

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P235	Keep cool.
P280	Wear protective gloves/protective clothing/eye protection/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.
P337+P313	If eye irritation persists: Get medical advice/attention.

Labelling of packages where the contents do not exceed 125 ml**Signal word:** Danger**Pictograms:****Hazard statements**

H361f-H336-H304

SECTION 3: Composition/information on ingredients**3.2. Mixtures****Chemical characterization**

Solvent-borne coatings

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Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	GHS Classification			
67-63-0	propan-2-ol; isopropyl alcohol; isopropanol			>50 %
	200-661-7	603-117-00-0	01-2119457558-25	
	Flam. Liq. 2, Eye Irrit. 2, STOT SE 3; H225 H319 H336			
64742-49-0	Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane			<20 %
	921-024-6		01-2119475514-35	
	Flam. Liq. 2, Skin Irrit. 2, STOT SE 3, Asp. Tox. 1, Aquatic Chronic 2; H225 H315 H336 H304 H411			
556-67-2	octamethylcyclotetrasiloxane			<25 %
	209-136-7	014-018-00-1		
	Flam. Liq. 3, Repr. 2, Aquatic Chronic 4; H226 H361f H413			
110-54-3	n-hexane			<0,5 %
	203-777-6	601-037-00-0		
	Flam. Liq. 2, Repr. 2, Skin Irrit. 2, STOT SE 3, STOT RE 2, Asp. Tox. 1, Aquatic Chronic 2; H225 H361f H315 H336 H373 H304 H411			

Full text of H and EUH statements: see section 16.

SECTION 4: First aid measures
4.1. Description of first aid measures
General information

Take off immediately all contaminated clothing.

After inhalation

Move to fresh air. Consult a physician after significant exposure. If victim is unconscious but breathing: Victim to lie down in the recovery position, cover and keep him warm. Call a physician immediately.

After contact with skin

Wash off immediately with soap and plenty of water. If skin irritation persists, call a physician.

After contact with eyes

 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 If eye irritation persists, consult a specialist.

After ingestion

Clean mouth with water and drink afterwards plenty of water. Do NOT induce vomiting. Give sodium sulfate as laxative (1 tablespoon in 1 glass of water) with plenty of activated coal.

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

No information available.

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

No information available.

SECTION 5: Firefighting measures
5.1. Extinguishing media
Suitable extinguishing media

 water spray, alcohol-resistant foam, dry chemical, carbon dioxide (CO₂)

Unsuitable extinguishing media

high volume water jet

according to Regulation (EC) No 1907/2006

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5.2. Special hazards arising from the substance or mixture

In use may form flammable/explosive vapour-air mixture.
Fire may cause evolution of: Carbon monoxide, Carbon dioxide)

5.3. Advice for firefighters

In the event of fire, wear self-contained breathing apparatus. Standard procedure for chemical fires.

Additional information

Use water spray to cool unopened containers.
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**

Use personal protective equipment. Keep people away from and upwind of spill/leak.
Ensure adequate ventilation.
Keep away from heat and sources of ignition.
Avoid contact with skin and eyes. Do not breathe vapour.

6.2. Environmental precautions

Do not flush into surface water or sanitary sewer system.
Due to danger of explosion, prevent leakage of vapours into cellars, flues and ditches.
Local authorities should be advised if significant spillages cannot be contained.

6.3. Methods and material for containment and cleaning up

Provide adequate ventilation. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Collect in closed and suitable containers for disposal.

6.4. Reference to other sections

Safe handling: see section 7
Personal protection equipment: see section 8
Disposal: see section 13

SECTION 7: Handling and storage**7.1. Precautions for safe handling****Advice on safe handling**

Provide adequate ventilation as well as local exhaust at critical locations.
Provide room air exhaust at ground level.
Avoid formation of aerosol. Do not breathe vapour/aerosol.
Avoid contact with the skin and the eyes.

Advice on protection against fire and explosion

Take precautionary measures against static discharges. Vapours are heavier than air and may spread along floors. Vapours may form explosive mixtures with air. Keep away from heat and sources of ignition. Do not smoke.

7.2. Conditions for safe storage, including any incompatibilities**Requirements for storage rooms and vessels**

Keep containers tightly closed in a cool, well-ventilated place.

SECTION 8: Exposure controls/personal protection**8.1. Control parameters**

according to Regulation (EC) No 1907/2006

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Exposure limits (EH40)

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
67-63-0	Propan-2-ol	400	999		TWA (8 h)	WEL
		500	1250		STEL (15 min)	WEL
110-54-3	n-Hexane	20	72		TWA (8 h)	WEL

DNEL/DMEL values

CAS No	Substance	Exposure route	Effect	Value
67-63-0	propan-2-ol; isopropyl alcohol; isopropanol			
Consumer DNEL, long-term		oral	systemic	26 mg/kg bw/day
Consumer DNEL, long-term		dermal	systemic	319 mg/kg bw/day
Worker DNEL, long-term		dermal	systemic	888 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	89 mg/m ³
Worker DNEL, long-term		inhalation	systemic	500 mg/m ³
64742-49-0	Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane			
Worker DNEL, long-term		dermal	systemic	773 mg/kg bw/day
Worker DNEL, long-term		inhalation	systemic	2035 mg/m ³
Consumer DNEL, long-term		dermal	systemic	699 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	608 mg/m ³
Consumer DNEL, long-term		oral	systemic	699 mg/kg bw/day

PNEC values

CAS No	Substance	Value
Environmental compartment		
67-63-0	propan-2-ol; isopropyl alcohol; isopropanol	
Freshwater		140,9 mg/l
Freshwater (intermittent releases)		140,9 mg/l
Marine water		140,9 mg/l
Freshwater sediment		552 mg/kg
Marine sediment		552 mg/kg
Micro-organisms in sewage treatment plants (STP)		2251 mg/l
Soil		28 mg/kg

8.2. Exposure controls

Appropriate engineering controls

Even in case of a full release, due to the small amount of substances present, it is not expected that exposure limits will be reached. However it is the duty of the user to verify this and follow given exposure limits at the workplace.

Protective and hygiene measures

Avoid contact with skin, eyes and clothing. Provide adequate ventilation. Take off all contaminated clothing immediately. Keep away from food, drink and animal feedingstuffs. When using do not eat or drink. Do not smoke. Wash hands before breaks and at the end of workday.

Eye/face protection

safety glasses with side-shields conforming to EN166

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Hand protection

The selected protective gloves have to satisfy the specifications of EU Directive 89/689/EEC and the standard EN 374 derived from it.

Glove material: Butyl caoutchouc (butyl rubber) $\geq 0,5\text{mm}$, NBR (Nitrile rubber) $\geq 0,35\text{mm}$
Breakthrough time (maximum wearing time) ≥ 480 min.

Skin protection

impervious clothing

Respiratory protection

This product should not be used under conditions of poor ventilation unless a protective mask with an appropriate gas filter (i.e. type A1 according to standard EN 14387) is used.

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Physical state:	liquid
Colour:	clear
Odour:	alcoholic

Test method

pH-Value (at 20 °C): 3

Changes in the physical state

Melting point:	-89,5 °C
Initial boiling point and boiling range:	82 °C
Flash point:	12 °C

Explosive properties

In use, may form flammable/explosive vapour-air mixture.

Lower explosion limits:	2 vol. %
Upper explosion limits:	12 vol. %
Ignition temperature:	425 °C

Auto-ignition temperature

not auto-flammable

Vapour pressure: (at 20 °C)	48 hPa
Density (at 20 °C):	0,79 g/cm ³
Water solubility: (at 20 °C)	soluble
Viscosity / dynamic: (at 20 °C)	2,4 mPa·s
Solvent content:	83%

9.2. Other information

Solid content:	5%
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SECTION 10: Stability and reactivity**10.1. Reactivity**

None under normal processing.

10.2. Chemical stability

No decomposition if used as directed.

10.3. Possibility of hazardous reactions

Vapours may form explosive mixture with air.

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10.4. Conditions to avoid

Keep away from heat and sources of ignition.
Take action to prevent static discharges.

10.5. Incompatible materials

strong acids and oxidizing agents

10.6. Hazardous decomposition products

None known.

SECTION 11: Toxicological information
11.1. Information on toxicological effects**Acute toxicity**

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
67-63-0	propan-2-ol; isopropyl alcohol; isopropanol				
	oral	LD50 mg/kg	4570	Rat	
	dermal	LD50 mg/kg	13400	Rabbit	
	inhalation (4 h) vapour	LC50	30 mg/l	Rat	
64742-49-0	Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane				
	oral	LD50 mg/kg	>5840	Rat	
	dermal	LD50 mg/kg	>2920	Rat	
	inhalation (4 h) vapour	LC50	25,2 mg/l	Rat	

Practical experience**Other observations**

Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and absorption through the skin. Inhalation of high vapour concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.

SECTION 12: Ecological information
12.1. Toxicity

according to Regulation (EC) No 1907/2006

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CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
67-63-0	propan-2-ol; isopropyl alcohol; isopropanol					
	Acute fish toxicity	LC50 mg/l	9640	96 h	Pimephales promelas (fathead minnow)	
	Acute algae toxicity	ErC50 mg/l	>2000	72 h	Desmodesmus subspicatus	
64742-49-0	Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane					
	Acute fish toxicity	LC50	11,4 mg/l	96 h	Oncorhynchus mykiss (Rainbow trout)	OECD 203
	Acute algae toxicity	ErC50 mg/l	30-100	72 h	Pseudokirchneriella subcapitata	OECD 201
	Acute crustacea toxicity	EC50	3 mg/l	48 h	Daphnia	OECD 202
	Fish toxicity	NOEC mg/l	2,04	28 d	Oncorhynchus mykiss (Rainbow trout)	
	Algae toxicity	NOEC	3 mg/l	3 d	Pseudokirchneriella subcapitata	OECD 201
	Crustacea toxicity	NOEC	1 mg/l	21 d	Daphnia magna (Big water flea)	OECD 211
110-54-3	n-hexane					
	Acute fish toxicity	LC50	2,5 mg/l	96 h	Pimephales promelas	Geiger et al. 1990

12.2. Persistence and degradability

Readily biodegradable, according to appropriate OECD test.

CAS No	Chemical name				
	Method	Value	d	Source	
	Evaluation				
64742-49-0	Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane				
	OECD 301F	98%	28		
	Readily biodegradable (according to OECD criteria).				

12.3. Bioaccumulative potential**Partition coefficient n-octanol/water**

CAS No	Chemical name	Log Pow
67-63-0	propan-2-ol; isopropyl alcohol; isopropanol	-0,16
110-54-3	n-hexane	3,9

12.4. Mobility in soil

The product evaporates readily.

Further information

Water hazard class (WGK) 3: highly water endangering

Do not let product enter drains.

SECTION 13: Disposal considerations**13.1. Waste treatment methods****Advice on disposal**

In accordance with local and national regulations.

Waste disposal number of waste from residues/unused products

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140603 WASTE ORGANIC SOLVENTS, REFRIGERANTS AND PROPELLANTS (EXCEPT 07 AND 08); waste organic solvents, refrigerants and foam/aerosol propellants; other solvents and solvent mixtures; hazardous waste

Waste disposal number of used product

140603 WASTE ORGANIC SOLVENTS, REFRIGERANTS AND PROPELLANTS (EXCEPT 07 AND 08); waste organic solvents, refrigerants and foam/aerosol propellants; other solvents and solvent mixtures; hazardous waste

Waste disposal number of contaminated packaging

150102 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); plastic packaging

Contaminated packaging

Non-contaminated packages may be recycled.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number: UN 1219
14.2. UN proper shipping name: ISOPROPANOL (ISOPROPYL ALCOHOL)
14.3. Transport hazard class(es): 3
14.4. Packing group: II
 Hazard label: 3



Classification code: F1
 Special Provisions: 601
 Limited quantity: 1 L
 Excepted quantity: E2
 Transport category: 2
 Hazard No: 33
 Tunnel restriction code: D/E

Inland waterways transport (ADN)

14.1. UN number: UN 1219
14.2. UN proper shipping name: ISOPROPANOL (ISOPROPYL ALCOHOL)
14.3. Transport hazard class(es): 3
14.4. Packing group: II
 Hazard label: 3



Classification code: F1
 Special Provisions: 601
 Limited quantity: 1 L
 Excepted quantity: E2

Marine transport (IMDG)

14.1. UN number: UN 1219
14.2. UN proper shipping name: ISOPROPANOL (ISOPROPYL ALCOHOL)
14.3. Transport hazard class(es): 3

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14.4. Packing group:

II

Hazard label:

3



Special Provisions:

-

Limited quantity:

1 L

Excepted quantity:

E2

EmS:

F-E, S-D

Air transport (ICAO-TI/IATA-DGR)**14.1. UN number:**

UN 1219

14.2. UN proper shipping name:

Isopropanol

14.3. Transport hazard class(es):

3

14.4. Packing group:

II

Hazard label:

3



Special Provisions:

A180

Limited quantity Passenger:

1 L

Passenger LQ:

Y341

Excepted quantity:

E2

IATA-packing instructions - Passenger:

353

IATA-max. quantity - Passenger:

5 L

IATA-packing instructions - Cargo:

364

IATA-max. quantity - Cargo:

60 L

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

14.6. Special precautions for user

none

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

not relevant

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****EU regulatory information**

Authorisations (REACH, annex XIV):

Substances of very high concern, SVHC (REACH, article 59):
octamethylcyclotetrasiloxane

Restrictions on use (REACH, annex XVII):

Entry 29: Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane

Entry 70: octamethylcyclotetrasiloxane

2004/42/EC (VOC):

83 % (656 g/l)

National regulatory information

Employment restrictions:

Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC).

Water contaminating class (D):

3 - highly water contaminating

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15.2. Chemical safety assessment

For this substance a chemical safety assessment has not been carried out.

SECTION 16: Other information**Classification for mixtures and used evaluation method according to Regulation (EC) No. 1272/2008 [CLP]**

Classification	Classification procedure
Flam. Liq. 2; H225	On basis of test data
Asp. Tox. 1; H304	Calculation method
Skin Irrit. 2; H315	Calculation method
Eye Irrit. 2; H319	Calculation method
Repr. 2; H361f	Calculation method
STOT SE 3; H336	Calculation method
Aquatic Chronic 2; H411	

Relevant H and EUH statements (number and full text)

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H361f	Suspected of damaging fertility.
H373	May cause damage to organs through prolonged or repeated exposure.
H411	Toxic to aquatic life with long lasting effects.
H413	May cause long lasting harmful effects to aquatic life.

Further Information

The information is based on present level of our knowledge. It does not, however, give assurances of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)