

Safety Data Sheet

according to 2001/58/EC

BOHLE Special Glass Cleaner

Print date : 25.04.2005

Product code : BO5107910

Page 1 of 5

1. Identification of the substance/preparation and of the company/undertaking**1.1 Identification of the substance or preparation**

BOHLE Special Glass Cleaner

Use of the substance/preparation

cleaning agent

1.2 Company/undertaking identification

Company name :	BOHLE AG	Telephone : 02129 5568-0
Street :	Dieselstr. 10	Telefax : 02129 5568 282
Place :	D-42781 Haan	
Contact person :	Uwe Adler	
e-mail :	uadler@bohle.de	
Inquiry office :	Produktmanagement	

2. Composition/information on ingredients

Chemical characterization (preparation)

Hazardous components

EC-No.	CAS-No.	Chemical name	Quantity	Classification
200-661-7	67-63-0	isopropanol, isopropyl alcohol, propan-2-ol	>95 %	F, Xi R11-36-67

Full text of each relevant R phrase can be found in heading 16.

3. Hazards identification**Classification**

Symbols : Highly flammable, Harmful, Irritant
R-phrases :
Highly flammable.
Irritating to eyes.
Vapours may cause drowsiness and dizziness.

4. First aid measures**General information**

Take off all contaminated clothing immediately. Remove from exposure, lie down. Move to fresh air.
Artificial respiration and/or oxygen may be necessary.

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

Rinse thoroughly with plenty of water, also under the eyelids. If eye irritation persists, consult a specialist.

After ingestion

Clean mouth with water and afterwards drink plenty of water. If swallowed, do not induce vomiting - seek medical advice.

5. Fire-fighting measures

Safety Data Sheet

according to 2001/58/EC

BOHLE Special Glass Cleaner

Print date : 25.04.2005

Product code : BO5107910

Page 2 of 5

Suitable extinguishing media

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

Extinguishing media which must not be used for safety reasons

high volume water jet

Special exposure hazards arriving from substance or preparation itself, combustion products, resulting gases

Fire may cause Carbon monoxide to evolve.

Special protective equipment for fire-fighters

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

Additional information

Water mist may be used to cool closed containers.

6. Accidental release measures

Personal precautions

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.

Environmental precautions

Do not flush into surface water or sanitary sewer system. Local authorities should be advised if significant spillages cannot be contained.

Methods for cleaning up/taking up

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Ensure adequate ventilation.

7. Handling and storage

7.1 Handling

Advice on safe handling

Handle and open container with care. Provide for appropriate exhaust ventilation and dust collection at machinery. Provide sufficient air exchange and/or exhaust in work rooms.

Advice on protection against fire and explosion

Use explosion-proof equipment. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapours). 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 Storage

Requirements for storage rooms and vessels

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

Storageclass (VCI) : 3A

8. Exposure controls/personal protection

8.1 Exposure limit values

Exposure limits (EH40)

CAS No.	Substance	ml/m ³	mg/m ³	F/m ³	Category	Origin
67-63-0	Propan-2-ol	400	999		TWA (8 h)	OES
	Propan-2-ol	500	1250		STEL (15 min)	OES

Safety Data Sheet

according to 2001/58/EC

BOHLE Special Glass Cleaner

Print date : 25.04.2005

Product code : BO5107910

Page 3 of 5

BAT values (TRGS 903)

CAS No.	Substance	Value	Parameter	Test material	Sampling time
67-63-0	2-Propanol	50 mg/l	Aceton	B	b

8.2 Exposure controls

Occupational exposure 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 feeding stuffs. When using do not eat or drink. Do not smoke. Wash hands before breaks and at the end of workday.

Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment.

Hand protection

solvent-resistant gloves (butylrubber)

Eye protection

tightly fitting safety goggles

Skin protection

impervious clothing

9. Physical and chemical properties

9.1 General information

Physical state : liquid
 Colour : clear
 Odour : alcoholic

9.2 Important health, safety and environmental information

pH-Value (at 20 °C) :

Test method
 neutral

Changes in the physical state

Melting point : -89,5 °C
 Boiling point : 82 °C
 Flash point : 12 °C

Flammability

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
 Vapour pressure : 48 hPa
 at (20 °C)
 Density (at 20 °C) : 0,785 g/cm³
 Water solubility : completely soluble
 Viscosity / dynamic : 2,43 mPa·s
 at (20 °C)
 Vapour density : 2
 at (20 °C)

Safety Data Sheet

according to 2001/58/EC

BOHLE Special Glass Cleaner

Print date : 25.04.2005

Product code : BO5107910

Page 4 of 5

10. Stability and reactivity

Conditions to avoid

No decomposition if used as directed.

Materials to avoid

strong acids and oxidising agents

Hazardous decomposition products

None known.

11. Toxicological information

Acute toxicity

LD50/oral/rat = 5840 mg/kg

Irritancy and corrosiveness

Mild eye irritation

Mild skin irritation

Subacute, subchronic and prolonged toxicity

Liver injury may occur.

Empirical data on effects on humans

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.

12. Ecological information

Ecotoxicity

Acute fish toxicity = LC50/48h/guppy = 8970 mg/l

Toxicity to daphnia LC50/48h/daphnia = > 1000 mg/l

Toxicity to algae LC50/96h/algae = > 1000mg/l

Mobility

The product evaporates readily.

Persistence and degradability

Readily biodegradable, according to appropriate OECD test.

Additional information

Do not let product enter drains.

13. Disposal considerations

Advice on disposal

In accordance with local and national regulations.

14. Transport information

Land transport (ADR/RID)

ADR/RID class :	3
Warnings plate	
Hazard-no. :	33
UN number :	1219
Hazard label :	3
ADR/RID packing group :	II

Description of the goods

ISOPROPANOL (ISOPROPYLALKOHOL)

Safety Data Sheet

according to 2001/58/EC

BOHLE Special Glass Cleaner

Print date : 25.04.2005

Product code : BO5107910

Page 5 of 5

Inland waterways transport

Marine transport

Air transport

15. Regulatory information

15.1 Labelling

Indication of danger :

F - Highly flammable; Xi - Irritant



F - Highly flammable

Xi - Irritant

R phrases :

- 11 Highly flammable.
- 36 Irritating to eyes.
- 67 Vapours may cause drowsiness and dizziness.

S phrases :

- 16 Keep away from sources of ignition - No smoking.
- 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- 24/25 Avoid contact with skin and eyes.

15.2 National regulations

16. Other information

List of relevant R phrases

- 11 Highly flammable.
- 36 Irritating to eyes.
- 67 Vapours may cause drowsiness and dizziness.

Other data

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.

Safety Data Sheet

according to 2001/58/EC

UV Adhesive B 682-T

Print date : 04.04.2005

Product code : BO5209394

Page 1 of 5

1. Identification of the substance/preparation and of the company/undertaking**1.1 Identification of the substance or preparation**

UV Adhesive B 682-T

Use of the substance/preparation
adhesives**1.2 Company/undertaking identification**

Company name :	BOHLE AG	Telephone : 02129 5568-0
Street :	Dieselstr. 10	Telefax : 02129 5568 282
Place :	D-42781 Haan	
Contact person :	Uwe Adler	
e-mail :	uadler@bohle.de	
Inquiry office :	Produktmanagement	

2. Composition/information on ingredients**Chemical characterization** (preparation)
Methacrylate/Acrylate resin(s).**Hazardous components**

EC-No.	CAS-No.	Chemical name	Quantity	Classification
212-782-2	868-77-9	2-hydroxyethyl methacrylate	10-25 %	Xi R36/38-43
227-561-6	5888-33-5	Isobornylacrylat	25-50 %	Xi R43-36/37/38
201-177-9	79-10-7	acrylic acid, prop-2-enoic acid	2,5-10 %	Xn, C, N R10-20/21/22-35-50

Full text of each relevant R phrase can be found in heading 16.

3. Hazards identification**Classification**

Symbols : Irritant
 R-phrases :
 May cause sensitization by skin contact.
 Irritating to eyes, respiratory system and skin.

4. First aid measures**After inhalation**

Move to fresh air. Consult a physician after significant exposure.

After contact with skin

Wash off with soap and plenty of water. If symptoms persist, call a physician. Show this safety data sheet to the doctor in attendance.

After contact with eyes

In case of eye contact, remove contact lens and rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If eye irritation persists, consult a specialist.

After ingestion

Do not induce vomiting. Immediately give large quantities of water to drink. Call a physician immediately.

5. Fire-fighting measures**Suitable extinguishing media**

water spray dry powder foam carbon dioxide (CO2)

Safety Data Sheet

according to 2001/58/EC

UV Adhesive B 682-T

Print date : 04.04.2005

Product code : BO5209394

Page 2 of 5

Extinguishing media which must not be used for safety reasons

Do not use a solid water stream as it may scatter and spread fire.

Special exposure hazards arriving from substance or preparation itself, combustion products, resulting gases

In the event of fire Carbon monoxide, nitrogen oxides (NOx) may be formed.

Special protective equipment for fire-fighters

Standard procedure for chemical fires. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. In the event of fire, wear self-contained breathing apparatus.

6. Accidental release measures

Personal precautions

Use personal protective equipment.

Environmental precautions

Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration.

Methods for cleaning up/taking up

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Sweep up and shovel into suitable containers for disposal. Ensure adequate ventilation.

7. Handling and storage

7.1 Handling

Advice on safe handling

Harmful: danger of serious damage to health by prolonged exposure through inhalation and in contact with skin. Ensure adequate ventilation, especially in confined areas. Breathing apparatus needed only when aerosol or mist is formed. Wash hands before breaks and at the end of workday. Keep away from food, drink and animal feeding stuffs.

Advice on protection against fire and explosion

No special technical protective measures required.

7.2 Storage

Requirements for storage rooms and vessels

Store in original container. Keep containers tightly closed in a dry, cool and well-ventilated place.

Advice on storage compatibility

No special restrictions on storage with other products

Further information on storage conditions

Keep away from direct sunlight. Keep away from heat.

8. Exposure controls/personal protection

8.1 Exposure limit values

Exposure limits (EH40)

CAS No.	Substance	ml/m ³	mg/m ³	F/m ³	Category	Origin
79-10-7	Acrylic acid	10	30		TWA (8 h)	OES
	Acrylic acid	20	60		STEL (15 min)	OES

8.2 Exposure controls

Occupational exposure controls

Safety Data Sheet

according to 2001/58/EC

UV Adhesive B 682-T

Print date : 04.04.2005

Product code : BO5209394

Page 3 of 5

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

Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. When using, do not eat, drink or smoke. Wash hands before breaks and at the end of workday. Keep away from food, drink and animal feeding stuffs

Respiratory protection

In case of insufficient ventilation wear suitable respiratory equipment.

Hand protection

rubber gloves

Eye protection

tightly fitting safety goggles

Skin protection

Avoid contact with skin, eyes and clothing. Remove and wash contaminated clothing before re-use.

9. Physical and chemical properties

9.1 General information

Physical state : liquid
 Colour : clear
 Odour : characteristic

9.2 Important health, safety and environmental information

pH-Value (at 20 °C) :	5	Test method
Changes in the physical state		
Flash point :	97 °C	
Explosive properties		
None		
Density (at 20 °C) :	1,0 g/cm ³	
Water solubility :	practically not soluble	
Viscosity / dynamic : at (20 °C)	800 mPa·s	
Solvent content		
0,0%		

10. Stability and reactivity

Conditions to avoid

Stable under recommended storage conditions.

Materials to avoid

oxidising agents, amines, strong acids

Hazardous decomposition products

No decomposition if used as directed.

11. Toxicological information

Irritancy and corrosiveness

Skin irritation. Severe eye irritation.

Safety Data Sheet

according to 2001/58/EC

UV Adhesive B 682-T

Print date : 04.04.2005

Product code : BO5209394

Page 4 of 5

Sensitising effect

May cause sensitisation by skin contact.

Subacute, subchronic and prolonged toxicity

Repeated or prolonged skin contact may cause skin irritation and/or dermatitis and sensitisation of susceptible persons.

12. Ecological information

Ecotoxicity

Ecological injuries are not known or expected under normal use.

13. Disposal considerations

Waste disposal number of waste from residues/unused products :

080409 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU of adhesives and sealants (including waterproofing products); waste adhesives and sealants containing organic solvents or other dangerous substances
Classified as hazardous waste.

14. Transport information

Land transport (ADR/RID)

Inland waterways transport

Marine transport

Air transport

Futher Information

Not a dangerous substance as defined in the above regulations.

15. Regulatory information

15.1 Labelling

Indication of danger : Xi - Irritant



Xi - Irritant

Labelling according to EC-guidelines : The product is classified and labelled in accordance with EC directives or respective national laws.

Hazardous component(s) to be indicated on label

acrylic acid, prop-2-enoic acid
2-hydroxyethyl methacrylate
Isobornylacrylat

R phrases :

43 May cause sensitization by skin contact.
36/37/38 Irritating to eyes, respiratory system and skin.

S phrases :

24 Avoid contact with skin.
26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
37 Wear suitable gloves.

Safety Data Sheet

according to 2001/58/EC

UV Adhesive B 682-T

Print date : 04.04.2005

Product code : BO5209394

Page 5 of 5

15.2 National regulations**16. Other information****List of relevant R phrases**

10	Flammable.
35	Causes severe burns.
43	May cause sensitization by skin contact.
50	Very toxic to aquatic organisms.
20/21/22	Harmful by inhalation, in contact with skin and if swallowed.
36/38	Irritating to eyes and skin.
36/37/38	Irritating to eyes, respiratory system and skin.

Other data

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.)