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

1.1. Product identifier

Glass edge laquer

UFI: 6X7X-AJ2Q-U004-N1UX

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

Use of the substance/mixture

Clear coating

1.3. Details of the supplier of the safety data sheet

Manufacturer

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:	Dr. Martin Schade	Telephone:	+49 2129 5568-300
E-mail:	MSDS@bohle.de		
Internet:	www.bohle.com		
Responsible Department:	Chemie		

Supplier

Company name:	Bohle Ltd
Street:	Fifth Avenue, Tameside Park
Place:	GB-SK14 6PP Dukinfield, Cheshire
Telephone:	0161 342 1100
E-mail:	info@bohle.ltd.uk

1.4. Emergency telephone number:

0344 892 0111
Office hours only.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Flam. Liq. 3; H226
STOT SE 3; H336
Aquatic Chronic 2; H411

Full text of hazard statements: see SECTION 16.

2.2. Label elements

Regulation (EC) No 1272/2008

Hazard components for labelling

Hydrocarbons, C10-C12, isoalkanes, < 2% aromatics
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics
Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics
1-methoxy-2-propanol; monopropylene glycol methyl ether

Signal word: Warning

Pictograms:



Hazard statements

H226	Flammable liquid and vapour.
H336	May cause drowsiness or dizziness.
H411	Toxic to aquatic life with long lasting effects.
EUH066	Repeated exposure may cause skin dryness or cracking.

Precautionary statements

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P273	Avoid release to the environment.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P370+P378	In case of fire: Use sand, earth, extinguishing powder or foam to extinguish.
P391	Collect spillage.

Labelling of packages where the contents do not exceed 125 ml

Signal word: Warning

Pictograms:



2.3. Other hazards

Spontaneous ignition possible through autoxidation of cloths soaked in the product. To avoid the risks of fires, all contaminated materials should be placed in a closed metal container soaked with water.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

One-pack performance coatings

Relevant ingredients

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (Regulation (EC) No 1272/2008)			
90622-57-4	Hydrocarbons, C10-C12, isoalkanes, < 2% aromatics			25 - < 30 %
	923-037-2			
	Flam. Liq. 3, Asp. Tox. 1, Aquatic Chronic 2; H226 H304 H411 EUH066			
	Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics			15 - < 20 %
	919-857-5		01-2119463258-33	
	Flam. Liq. 3, STOT SE 3, Asp. Tox. 1; H226 H336 H304 EUH066			
	Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics			5 - < 10 %
	920-750-0		01-2119473851-33	
	Flam. Liq. 2, STOT SE 3, Asp. Tox. 1, Aquatic Chronic 2; H225 H336 H304 H411			
107-98-2	1-methoxy-2-propanol; monopropylene glycol methyl ether			1 - < 5 %
	203-539-1	603-064-00-3	01-2119457435-35	
	Flam. Liq. 3, STOT SE 3; H226 H336			
	Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, < 2% aromatics			1 - < 5 %
	927-241-2		01-2119471843-32	
	Flam. Liq. 3, STOT SE 3, Asp. Tox. 1, Aquatic Chronic 3; H226 H336 H304 H412 EUH066			
2457-01-4	Barium bis(2-ethylhexanoate)			< 1 %
	219-535-8		01-2119983179-22	
	Repr. 1B, Acute Tox. 4, Acute Tox. 4, Eye Dam. 1; H360D H332 H302 H318			
85203-81-2	Hexanoic acid, 2-ethyl-, zinc salt, basic			< 1 %
	Repr. 1A, Eye Irrit. 2, Aquatic Chronic 2; H360D H319 H411			
136-52-7	Cobalt bis(2-ethylhexanoate)			< 0.1 %
	205-250-6		01-2119524678-29	
	Repr. 1A, Eye Irrit. 2, Skin Sens. 1A, Aquatic Chronic 3; H360FD H319 H317 H412			

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

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
	Specific Conc. Limits, M-factors and ATE		
107-98-2	203-539-1	1-methoxy-2-propanol; monopropylene glycol methyl ether	1 - < 5 %
	dermal: LD50 = 11000 mg/kg; oral: LD50 = > 5000 mg/kg		
2457-01-4	219-535-8	Barium bis(2-ethylhexanoate)	< 1 %
	inhalation: ATE = 11 mg/l (vapours); inhalation: ATE = 1,5 mg/l (dusts or mists); oral: ATE = 500 mg/kg		

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.

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

Headache
Dizziness
Dizziness
Nausea
Unconsciousness

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

alcohol-resistant foam, dry chemical, carbon dioxide (CO_2)

Unsuitable extinguishing media

high volume water jet

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

General advice

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

Other information

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 exhaustion 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

To avoid the risks of fires, all contaminated materials should be placed in a closed metal container soaked with water. 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.

Advice on general occupational hygiene

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.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep only in the original container in a cool, well-ventilated place. Protect from frost, heat and sunlight.

7.3. Specific end use(s)

This information is not available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m³	fibres/ml	Category	Origin
107-98-2	1-Methoxypropan-2-ol	100	375		TWA (8 h)	WEL
		150	560		STEL (15 min)	WEL
13463-67-7	Titanium dioxide, respirable	-	4		TWA (8 h)	WEL

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.

Individual protection measures, such as personal protective equipment

Eye/face protection

safety glasses with side-shields conforming to EN166

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) >=0,5mm, NBR (Nitrile rubber) >=0,35mm
Breakthrough 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:	dark yellow
Odour:	characteristic

		Test method
Melting point/freezing point:	not determined	
Boiling point or initial boiling point and boiling range:	102 °C	
Lower explosion limits:	not determined	
Upper explosion limits:	not determined	
Flash point:	31 °C	DIN 51755
Auto-ignition temperature:	not determined	
Decomposition temperature:	not determined	
pH-Value (at 20 °C):	not applicable	
Viscosity / kinematic: (at 20 °C)	22 mm²/s	
Water solubility:	not determined	
Vapour pressure: (at 50 °C)	not determined	
Density (at 20 °C):	0,880 g/cm³	

9.2. Other information

Information with regard to physical hazard classes

Explosive properties

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

Self-ignition temperature	not auto-flammable

Other safety characteristics

Solvent separation test:	<3%
Solvent content:	<500,0 g/l
Viscosity / dynamic: (at 20 °C)	not determined

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.

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 hazard classes

Acute toxicity

LD50/oral/rat = >2000mg/kg

ATEmix calculated

ATE (oral) > 2000 mg/kg; ATE (dermal) > 2000 mg/kg

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
107-98-2	1-methoxy-2-propanol; monopropylene glycol methyl ether				
	oral	LD50 > 5000 mg/kg	Rat	IUCLID	
	dermal	LD50 11000 mg/kg	Rabbit		
2457-01-4	Barium bis(2-ethylhexanoate)				
	oral	ATE 500 mg/kg			
	inhalation vapour	ATE 11 mg/l			
	inhalation dust/mist	ATE 1,5 mg/l			

11.2. Information on other hazards

Endocrine disrupting properties

This information is not available.

Other information

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

Ecological injuries are not known or expected under normal use.

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] | [d]	Species	Source	Method
107-98-2	1-methoxy-2-propanol; monopropylene glycol methyl ether					
	Acute fish toxicity	LC50 4600 - 10000 mg/l	96 h	Leuciscus idus	IUCLID	
	Acute algae toxicity	ErC50 > 1000 mg/l	72 h	Selenastrum capricornutum		
	Acute crustacea toxicity	EC50 > 500 mg/l	48 h	Daphnia magna	IUCLID	

12.2. Persistence and degradability

Not readily biodegradable.

12.3. Bioaccumulative potential

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
107-98-2	1-methoxy-2-propanol; monopropylene glycol methyl ether	-0,437

12.4. Mobility in soil

The product evaporates readily.

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to UK REACH.
The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

12.7. Other adverse effects

This information is not available.

Further information

Do not let product enter drains.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

In accordance with local and national regulations. To avoid the risks of fires, all contaminated materials should be placed in a closed metal container soaked with water.

List of Wastes Code - residues/unused products

080111 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU and removal of paint and varnish; waste paint and varnish containing organic solvents or other hazardous substances; hazardous waste

List of Wastes Code - used product

080111 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU and removal of paint and varnish; waste paint and varnish containing organic solvents or other hazardous substances; hazardous waste

List of Wastes Code - contaminated packaging

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by hazardous substances; hazardous waste

Contaminated packaging

Non-contaminated packages may be recycled.
Contaminated packages must be completely emptied and can be re-used following proper cleaning.
Cleaning agent: n-Butyl acetate

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number or ID number:	UN 1993
14.2. UN proper shipping name:	FLAMMABLE LIQUID, N.O.S. (Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics)
14.3. Transport hazard class(es):	3
14.4. Packing group:	III
Hazard label:	3



Classification code:	F1
Special Provisions:	274 601
Limited quantity:	5 L

Excepted quantity:	E1
Transport category:	3
Hazard No:	30
Tunnel restriction code:	D/E

Inland waterways transport (ADN)

14.1. UN number or ID number:	UN 1993
14.2. UN proper shipping name:	FLAMMABLE LIQUID, N.O.S. (Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics)
14.3. Transport hazard class(es):	3
14.4. Packing group:	III
Hazard label:	3



Classification code:	F1
Special Provisions:	274 601
Limited quantity:	5 L
Excepted quantity:	E1

Marine transport (IMDG)

14.1. UN number or ID number:	UN 1993
14.2. UN proper shipping name:	FLAMMABLE LIQUID, N.O.S. (Solvent Naphtha)
14.3. Transport hazard class(es):	3
14.4. Packing group:	III
Hazard label:	3



Special Provisions:	223 274 955
Limited quantity:	5 L
Excepted quantity:	E1
EmS:	F-E, S-E

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number or ID number:	UN 1993
14.2. UN proper shipping name:	FLAMMABLE LIQUID, N.O.S. (Solvent Naphtha)
14.3. Transport hazard class(es):	3
14.4. Packing group:	III
Hazard label:	3



Special Provisions:	A3
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: Yes



14.6. Special precautions for user

none

14.7. Maritime transport in bulk according to IMO instruments

not relevant

SECTION 15: Regulatory information

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

EU regulatory information

Restrictions on use (REACH, annex XVII):

Entry 3, Entry 40

Directive 2004/42/EC on VOC in paints and varnishes:	< 500,0 g/l
Subcategory according to Directive 2004/42/EC:	Special finishes - All types, VOC limit value: 840 g/l

National regulatory information

Employment restrictions:	Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.
Water hazard class (D):	1 - slightly hazardous to water

15.2. Chemical safety assessment

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

SECTION 16: Other information

Abbreviations and acronyms

Flam. Liq. 2: Flammable liquids, hazard category 2
Flam. Liq. 3: Flammable liquids, hazard category 3
Acute Tox. 4: Acute toxicity, hazard category 4
Asp. Tox. 1: Aspiration hazard, hazard category 1
Eye Dam. 1: Serious eye damage, hazard category 1
Eye Irrit. 2: Eye irritation, hazard category 2
Skin Sens. 1A: Skin sensitisation, hazard category 1A
Repr. 1A: Reproductive toxicity, hazard category 1A
Repr. 1B: Reproductive toxicity, hazard category 1B
STOT SE 3: Specific target organ toxicity - single exposure, hazard category 3
Aquatic Chronic 2: Hazardous to the aquatic environment, long-term hazard category: Chronic 2
Aquatic Chronic 3: Hazardous to the aquatic environment, long-term hazard category: Chronic 3

Classification for mixtures and used evaluation method

Classification	Classification procedure
Flam. Liq. 3; H226	
STOT SE 3; H336	Calculation method
Aquatic Chronic 2; H411	Calculation method

Relevant H and EUH statements (number and full text)

H225 Highly flammable liquid and vapour.

H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H336	May cause drowsiness or dizziness.
H360D	May damage the unborn child.
H360FD	May damage fertility. May damage the unborn child.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
EUH066	Repeated exposure may cause skin dryness or cracking.

Further Information

The information is based on the present level of our knowledge. It does not, however, give assurance 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 relevant ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)