Safety Data Sheet

according to Regulation (EC) No 1907/2006

UV adhesive VERIFIX B 678-0 "Lamifix"

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

1.1. Product identifier

UV adhesive VERIFIX B 678-0 "Lamifix"

Further trade names

BO 5209360, 85 g
BO 5209362, 1000 g / BO 5209362S, Spacer, 1000 g

UFI: HR21-U0QX-300W-M469

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

Use of the substance/mixture

adhesives

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

1.4. Emergency telephone number:

Emergency CONTACT (24-Hour-Number): GBK GmbH +49 (0)6132-84463

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Skin Irrit. 2; H315
Eye Irrit. 2; H319
Skin Sens. 1; H317
STOT SE 3; H335
Aquatic Chronic 3; H412

Full text of hazard statements: see SECTION 16.

2.2. Label elements

Regulation (EC) No 1272/2008

Hazard components for labelling

2-ethylhexyl methacrylate
2-hydroxyethyl methacrylate
Ethyl Phenyl(2,4,6-Trimethylbenoyl)phosphinate

Signal word: Warning

Pictograms:



Hazard statements

H315	Causes skin irritation.
H319	Causes serious eye irritation.
H317	May cause an allergic skin reaction.

H335	May cause respiratory irritation.
H412	Harmful to aquatic life with long lasting effects.

Precautionary statements

P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P302+P352	IF ON SKIN: Wash with plenty of water and soap.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312	Call a POISON CENTER/doctor if you feel unwell.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Methacrylate/Acrylate resin(s).

Relevant ingredients

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (Regulation (EC) No 1272/2008)			
688-84-6	2-ethylhexyl methacrylate			< 30 %
	211-708-6		01-2119490166-35	
	Skin Irrit. 2, Eye Irrit. 2, Skin Sens. 1, STOT SE 3, Aquatic Chronic 3; H315 H319 H317 H335 H412			
868-77-9	2-hydroxyethyl methacrylate			< 30 %
	212-782-2	607-124-00-X	01-2119490169-29	
	Skin Irrit. 2, Eye Irrit. 2, Skin Sens. 1; H315 H319 H317			
84434-11-7	Ethyl Phenyl(2,4,6-Trimethylbenoyl)phosphinate			1 - < 5 %
	282-810-6		01-2119987994-10	
	Skin Sens. 1B, Aquatic Chronic 2; H317 H411			

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		
688-84-6	211-708-6	2-ethylhexyl methacrylate	< 30 %
	oral: LD50 = 16465 mg/kg STOT SE 3; H335: >= 10 - 100		
868-77-9	212-782-2	2-hydroxyethyl methacrylate	< 30 %
	dermal: LD50 = >5000 mg/kg; oral: LD50 = 5050 mg/kg		

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

First aider: Pay attention to self-protection!
Get medical advice/attention if you feel unwell.

After inhalation

Remove casualty to fresh air and keep warm and at rest. If symptoms persist, call a physician.

After contact with skin

Take off contaminated clothing and wash it before reuse. After contact with skin, wash immediately with plenty of water and soap. When in doubt or if symptoms are observed, get medical advice.

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.

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

Inhalation: Irritation to respiratory tract
Skin contact : May cause an allergic skin reaction.
Eye contact : Causes serious eye damage.

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

Water spray jet, Extinguishing powder, Foam, Carbon dioxide (CO2)

Unsuitable extinguishing media

Full water jet

5.2. Special hazards arising from the substance or mixture

Carbon monoxide, nitrogen oxides (NOx)

5.3. Advice for firefighters

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.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General advice

Wear personal protection equipment (refer to section 8).
Provide adequate ventilation.

6.2. Environmental precautions

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

6.3. Methods and material for containment and cleaning up

Other information

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.

6.4. Reference to other sections

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

Avoid contact with skin and eyes.
Do not eat, drink or smoke when using this product.
Ensure adequate ventilation.

Advice on protection against fire and explosion

No special technical protective measures required.

Advice on general occupational hygiene

Wash hands before breaks and after work. When using do not eat, drink or smoke.
Take off immediately all contaminated clothing and wash it before reuse. Draw up and observe skin protection programme.

Further information on handling

Avoid: UV-radiation/sunlight

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.
Keep container tightly closed. Keep locked up.
Recommended storage temperature 5 - 25°C. Keep away from direct sunlight.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Additional advice on limit values

To date, no national critical limit values exist.

8.2. Exposure controls

Appropriate engineering controls

Provide sufficient air exchange and/or exhaust in work rooms.
Do not breathe vapour. To follow: Occupational exposure limit values

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.
Recommended material: NBR (Nitrile rubber), VITON
Unsuitable material: Natural fibres (e.g. cotton)

Skin protection

Wear suitable protective clothing.

Respiratory protection

Usually no personal respirative protection necessary. When using do not eat, drink or smoke.
In case of inadequate ventilation wear respiratory protection. Full-/half-/quarter-face masks (EN 136/140)
Respirator with filter for organic vapour. Recommended Filter type: A (P2)

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	Liquid		
Colour:	colourless		
Odour:	characteristic		
			Test method
Flash point:		>100 °C	
pH-Value (at 21 °C):		4	5% emulsion
Water solubility:		insoluble	
Density (at 20 °C):		1,05 g/cm³	

9.2. Other information

Other safety characteristics

Solvent content:	0%

Viscosity / dynamic: (at 25 °C)	550 mPa·s

SECTION 10: Stability and reactivity

10.1. Reactivity

Light / UV-radiation/sunlight
Oxidising agent, strong

10.2. Chemical stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

No known hazardous reactions.

10.4. Conditions to avoid

Keep cool. Protect from sunlight. Heat, flames and sparks.
In case of light influence: Polymerisation

10.5. Incompatible materials

Reducing agent, strong. Oxidising agent, strong
strong acids and strong bases

10.6. Hazardous decomposition products

No decomposition if stored and applied as directed.
Thermal decomposition can lead to the escape of irritating gases and vapours. Carbon monoxide (CO), Carbon dioxide (CO_2), Hydrocarbons

SECTION 11: Toxicological information

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

ATEmix calculated

ATE (oral) > 2000 mg/kg; ATE (dermal) > 2000 mg/kg; ATE (inhalation vapour) > 20 mg/l; ATE (inhalation dust/mist) > 5 mg/l

Acute toxicity

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
688-84-6	2-ethylhexyl methacrylate				
	oral	LD50 16465 mg/kg	Rat		
868-77-9	2-hydroxyethyl methacrylate				
	oral	LD50 5050 mg/kg	Rat		
	dermal	LD50 >5000 mg/kg	Rabbit		

11.2. Information on other hazards

Endocrine disrupting properties

This information is not available.

SECTION 12: Ecological information

12.1. Toxicity

CAS No	Chemical name						
	Aquatic toxicity	Dose		[h] | [d]	Species	Source	Method
868-77-9	2-hydroxyethyl methacrylate						
	Acute fish toxicity	LC50	227 mg/l	96 h	Pimephales promelas		

12.2. Persistence and degradability

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
688-84-6	2-ethylhexyl methacrylate			
	OECD 301C/ ISO 9408/ EEC 92/69/V, C.4-F	88%	28	
	Readily biodegradable (according to OECD criteria).			

12.3. Bioaccumulative potential

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
868-77-9	2-hydroxyethyl methacrylate	0,47

12.4. Mobility in soil

This information is not available.

12.5. Results of PBT and vPvB assessment

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.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Consult the appropriate local waste disposal expert about waste disposal.

List of Wastes Code - 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 hazardous substances; hazardous waste

List of Wastes Code - used product

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 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

Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

Other applicable information

Not dangerous goods in the meaning of ADR/RID, ADNR, IMDG-Code, ICAO/IATA-DGR

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 75

Directive 2004/42/EC on VOC in paints and varnishes:	0 % 0 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. Observe employment restrictions for women of child-bearing age.
Water hazard class (D):	1 - slightly hazardous to water

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Abbreviations and acronyms

Skin Irrit. 2: Skin irritation, hazard category 2
Eye Irrit. 2: Eye irritation, hazard category 2
Skin Sens. 1: Skin sensitisation, hazard category 1
Skin Sens. 1B: Skin sensitisation, 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 according to Regulation (EC) No 1272/2008 [CLP]

Classification	Classification procedure
Skin Irrit. 2; H315	Calculation method
Eye Irrit. 2; H319	Calculation method
Skin Sens. 1; H317	Calculation method
STOT SE 3; H335	Calculation method
Aquatic Chronic 3; H412	Calculation method

Relevant H and EUH statements (number and full text)

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Further Information

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

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