

UV Adhesive VERIFIX B 665-0

Revision date: 06/22/2023

Product code: BO5209300

Page 1 of 12

1. Identification**Product identifier**

UV Adhesive VERIFIX B 665-0

Further trade names

BO 5209327, 20 g
BO 5209300, 100 g
BO 5209321, 250 g
BO 5209324, 1000 g

Recommended use of the chemical and restrictions on use**Use of the substance/mixture**

adhesives

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	

Trader of the product

Company name:	Bohle America, Inc.
Street:	10924 Granite Street, Suite 200
Place:	USA-NC 28273 Charlotte
e-mail (Contact person):	sales@bohle.com

Emergency phone number: Emergency CONTACT (24-Hour-Number):GBK GmbH +49 (0)6132-84463**2. Hazard(s) identification****Classification of the chemical****Regulation (EC) No 1272/2008**

Skin Irrit. 2; H315
Eye Dam. 1; H318
Skin Sens. 1; H317
STOT SE 3; H335
Aquatic Acute 1; H400
Aquatic Chronic 1; H410

Full text of hazard statements: see SECTION 16.

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

2-hydroxyethyl methacrylate
Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl acrylate
acrylic acid, prop-2-enoic acid
maleic acid
tert-butyl perbenzoate
3-methoxysilylpropyl methacrylate

UV Adhesive VERIFIX B 665-0

Revision date: 06/22/2023

Product code: BO5209300

Page 2 of 12

Signal word: Danger

Pictograms:



Hazard statements

- H315 Causes skin irritation
- H318 Causes serious eye damage
- H317 May cause an allergic skin reaction
- H335 May cause respiratory irritation
- H412 Harmful to aquatic life with long lasting effects

Precautionary statements

- 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.
- P310 Immediately call a poison center/doctor.
- P333+P317 If skin irritation or rash occurs: Get medical help.

Special labelling of certain mixtures

- EUH208 Contains 3-methoxysilylpropyl methacrylate. May produce an allergic reaction.

3. Composition/information on ingredients

Mixtures

Chemical characterization

Methacrylate/Acrylate resin(s).

UV Adhesive VERIFIX B 665-0

Revision date: 06/22/2023

Product code: BO5209300

Page 3 of 12

Hazardous components

CAS No	Components			Quantity
	EC No	Index No	REACH No	
	Classification (Regulation (EC) No 1272/2008)			
868-77-9	2-hydroxyethyl methacrylate			<39 %
	212-782-2	607-124-00-X	01-2119490169-29	
	Skin Irrit. 2, Eye Irrit. 2, Skin Sens. 1; H315 H319 H317			
5888-33-5	Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl acrylate			<39 %
	227-561-6		01-2119957862-25	
	Skin Irrit. 2, Eye Irrit. 2, Skin Sens. 1, STOT SE 3, Aquatic Acute 1, Aquatic Chronic 1; H315 H319 H317 H335 H400 H410			
79-10-7	acrylic acid, prop-2-enoic acid			<5 %
	201-177-9	607-061-00-8	01-2119452449-31	
	Flam. Liq. 3, Acute Tox. 4, Acute Tox. 4, Acute Tox. 4, Skin Corr. 1A, Aquatic Acute 1; H226 H332 H312 H302 H314 H400			
614-45-9	tert-butyl perbenzoate			<3 %
	210-382-2		01-2119513317-46	
	Org. Perox. C, Acute Tox. 4, Skin Irrit. 2, Skin Sens. 1, Aquatic Acute 1, Aquatic Chronic 3; H242 H332 H315 H317 H400 H412			
24650-42-8	2,2-dimethoxy-1,2-diphenylethan-1-one			<3 %
	246-386-6		01-2120000336-73	
	Aquatic Acute 1, Aquatic Chronic 1; H400 H410			
110-16-7	maleic acid			1 - < 5 %
	203-742-5	607-095-00-3	01-2119488705-25	
	Acute Tox. 4, Skin Irrit. 2, Eye Irrit. 2, Skin Sens. 1, STOT SE 3; H302 H315 H319 H317 H335			
2530-85-0	3-methoxysilylpropyl methacrylate			<1 %
	219-785-8		01-2119513216-50	
	Skin Sens. 1; H317			

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

UV Adhesive VERIFIX B 665-0

Revision date: 06/22/2023

Product code: BO5209300

Page 4 of 12

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Components	Quantity
		Specific Conc. Limits, M-factors and ATE	
868-77-9	212-782-2	2-hydroxyethyl methacrylate	<39 %
		dermal: LD50 = >5000 mg/kg; oral: LD50 = 5050 mg/kg	
5888-33-5	227-561-6	Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl acrylate	<39 %
		dermal: LD50 = >5000 mg/kg; oral: LD50 = >5000 mg/kg Aquatic Acute 1; H400: M=1 Aquatic Chronic 1; H410: M=1	
79-10-7	201-177-9	acrylic acid, prop-2-enoic acid	<5 %
		inhalation: LC50 = 11 mg/l (vapours); inhalation: ATE = 1,5 mg/l (dusts or mists); dermal: LD50 = 1100 mg/kg; oral: LD50 = 500 mg/kg STOT SE 3; H335: >= 1 - 100 Aquatic Acute 1; H400: M=1	
614-45-9	210-382-2	tert-butyl perbenzoate	<3 %
		inhalation: ATE = 11 mg/l (vapours); inhalation: ATE = 1,5 mg/l (dusts or mists); dermal: LD50 = 3817 mg/kg; oral: LD50 = 4838 mg/kg	
24650-42-8	246-386-6	2,2-dimethoxy-1,2-diphenylethan-1-one	<3 %
		oral: LD50 = >2000 mg/kg	
110-16-7	203-742-5	maleic acid	1 - < 5 %
		dermal: LD50 = 1560 mg/kg; oral: LD50 = 1090 mg/kg Skin Sens. 1; H317: >= 0,1 - 100	
2530-85-0	219-785-8	3-methoxysilylpropyl methacrylate	<1 %
		oral: LD50 = >5000 mg/kg	

4. First-aid measures
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.

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.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

5. Fire-fighting measures
Extinguishing media
Suitable extinguishing media

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

Unsuitable extinguishing media

Full water jet

UV Adhesive VERIFIX B 665-0

Revision date: 06/22/2023

Product code: BO5209300

Page 5 of 12

Specific hazards arising from the chemical

Burning produces irritant fumes. Carbon monoxide, Carbon dioxide, Hydrocarbons, Nitrogen oxides (NOx)

Special protective equipment and precautions 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, protective equipment and emergency procedures****General advice**

Wear personal protection equipment (refer to section 8).

Provide adequate ventilation.

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.

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.

Reference to other sections

Personal protection equipment (PPE): see section 8

Disposal: see section 13

7. Handling and storage**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

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.

Specific end use(s)

adhesive

8. Exposure controls/personal protection**Control parameters**

UV Adhesive VERIFIX B 665-0

Revision date: 06/22/2023

Product code: BO5209300

Page 6 of 12

Exposure limits

CAS No	Substance	ppm	mg/m ³	f/cc	Category	Origin
79-10-7	Acrylic acid	2	6		TWA (8 h)	REL

DNEL/DMEL values

CAS No	Substance	Exposure route	Effect	Value
5888-33-5	Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl acrylate			
	Worker DNEL, long-term	dermal	systemic	1,39 mg/kg bw/day
79-10-7	acrylic acid, prop-2-enoic acid			
	Worker DNEL, long-term	inhalation	systemic	30 mg/m ³
	Worker DNEL, acute	inhalation	systemic	30 mg/m ³
	Worker DNEL, long-term	inhalation	local	30 mg/m ³
	Worker DNEL, acute	inhalation	local	30 mg/m ³

PNEC values

CAS No	Substance	Environmental compartment	Value
5888-33-5	Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl acrylate		
	Freshwater		0,00092 mg/l
	Marine water		0,000092 mg/l
	Freshwater sediment		0,145 mg/kg
	Marine sediment		0,0145 mg/kg
	Micro-organisms in sewage treatment plants (STP)		2 mg/l
	Soil		0,0285 mg/kg
79-10-7	acrylic acid, prop-2-enoic acid		
	Freshwater		0,003 mg/l
	Freshwater (intermittent releases)		0,0013 mg/l
	Marine water		0,0003 mg/l
	Freshwater sediment		0,0236 mg/kg
	Marine sediment		0,00234 mg/kg

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.

UV Adhesive VERIFIX B 665-0

Revision date: 06/22/2023

Product code: BO5209300

Page 7 of 12

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)

9. Physical and chemical properties
Information on basic physical and chemical properties

Physical state:	Liquid
Color:	colorless
Odor:	characteristic

	Test method
Flash point:	101 °C
Auto-ignition temperature:	238 °C
pH-Value (at 21 °C):	2 5% emulsion
Water solubility:	practically insoluble

Other information
Information with regard to physical hazard classes

Explosive properties
 None.

Other safety characteristics

Solvent content:	0%
Viscosity / dynamic: (at 25 °C)	55 mPa·s

10. Stability and reactivity
Reactivity

Light / UV-radiation/sunlight
 Oxidizing agent, strong

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

No known hazardous reactions.

Conditions to avoid

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

Incompatible materials

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

Hazardous decomposition products

No decomposition if stored and applied as directed.
 Thermal decomposition can lead to the escape of irritating gases and vapors. Carbon monoxide (CO), Carbon dioxide (CO₂), Hydrocarbons

11. Toxicological information
Information on toxicological effects

UV Adhesive VERIFIX B 665-0

Revision date: 06/22/2023

Product code: BO5209300

Page 8 of 12

Acute toxicity

CAS No	Components					
	Exposure route	Dose		Species	Source	Method
868-77-9	2-hydroxyethyl methacrylate					
	oral	LD50 mg/kg	5050	Rat		
	dermal	LD50 mg/kg	>5000	Rabbit		
5888-33-5	Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl acrylate					
	oral	LD50 mg/kg	>5000	Rat		
	dermal	LD50 mg/kg	>5000	Rabbit		
79-10-7	acrylic acid, prop-2-enoic acid					
	oral	LD50 mg/kg	500	Rat		
	dermal	LD50 mg/kg	1100	Rat		
	inhalation (4 h) vapour	LC50	11 mg/l	Rat		
	inhalation dust/mist	ATE	1,5 mg/l			
614-45-9	tert-butyl perbenzoate					
	oral	LD50 mg/kg	4838	Rat		
	dermal	LD50 mg/kg	3817	Rabbit		
	inhalation vapour	ATE	11 mg/l			
	inhalation dust/mist	ATE	1,5 mg/l			
24650-42-8	2,2-dimethoxy-1,2-diphenylethan-1-one					
	oral	LD50 mg/kg	>2000	Rat		
110-16-7	maleic acid					
	oral	LD50 mg/kg	1090	Rat	OECD 401	
	dermal	LD50 mg/kg	1560	Rabbit		
2530-85-0	3-methoxysilylpropyl methacrylate					
	oral	LD50 mg/kg	>5000	Rat		

12. Ecological information
Ecotoxicity

UV Adhesive VERIFIX B 665-0

Revision date: 06/22/2023

Product code: BO5209300

Page 9 of 12

CAS No	Components					
	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		
5888-33-5	Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl acrylate					
	Acute fish toxicity	LC50 0,704 mg/l	96 h	Danio rerio (zebrafish)	OECD 203	
	Crustacea toxicity	NOEC 0,092 mg/l	21 d	Daphnia magna (Big water flea)		
614-45-9	tert-butyl perbenzoate					
	Acute fish toxicity	LC50 1,6 mg/l	96 h	Danio rerio (zebrafish)	OECD 203	
	Acute algae toxicity	ErC50 1,3 mg/l	72 h	Pseudokirchneriella subcapitata	OECD 201	
	Acute crustacea toxicity	EC50 11 mg/l	48 h	Daphnia magna (Big water flea)	OECD 202	
24650-42-8	2,2-dimethoxy-1,2-diphenylethan-1-one					
	Acute fish toxicity	LC50 6 mg/l	96 h	Lepomis macrochirus (Bluegill)		
	Acute algae toxicity	ErC50 0,17 mg/l	72 h			
	Acute crustacea toxicity	EC50 26 mg/l	48 h	Daphnia magna (Big water flea)		
110-16-7	maleic acid					
	Acute fish toxicity	LC50 75 mg/l	96 h	Oncorhynchus mykiss (Rainbow trout)		
	Acute algae toxicity	ErC50 74,35 mg/l	72 h	Pseudokirchneriella subcapitata	OECD 201	
	Acute crustacea toxicity	EC50 42,81 mg/l	48 h	Daphnia magna (Big water flea)	OECD 202	
2530-85-0	3-methoxysilylpropyl methacrylate					
	Acute fish toxicity	LC50 >1024 mg/l	96 h	Danio rerio (zebrafish)		
	Acute algae toxicity	ErC50 >536 mg/l	72 h	Scenedesmus subspicatus		
	Acute crustacea toxicity	EC50 >876 mg/l	48 h	Daphnia magna (Big water flea)		

CAS No	Components			
	Method	Value	d	Source
	Evaluation			
5888-33-5	Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl acrylate			
		57%	28	
614-45-9	tert-butyl perbenzoate			
	aerob	70%	28	
	Readily biodegradable, according to appropriate OECD test.			
2530-85-0	3-methoxysilylpropyl methacrylate			
	aerob	69%	28	
	Readily biodegradable (according to OECD criteria).			

UV Adhesive VERIFIX B 665-0

Revision date: 06/22/2023

Product code: BO5209300

Page 10 of 12

Partition coefficient n-octanol/water

CAS No	Components	Log Pow
868-77-9	2-hydroxyethyl methacrylate	0,47
5888-33-5	Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl acrylate	4,52
79-10-7	acrylic acid, prop-2-enoic acid	0,35
614-45-9	tert-butyl perbenzoate	3
110-16-7	maleic acid	-1,3
2530-85-0	3-methoxysilylpropyl methacrylate	2,1

BCF

CAS No	Components	BCF	Species	Source
110-16-7	maleic acid	<10		

Results of PBT and vPvB assessment

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

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.

13. Disposal considerations
Waste treatment methods
Disposal recommendations

Consult the appropriate local waste disposal expert about waste disposal.

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.

14. Transport information
Land transport (ADR/RID)
UN number or ID number:

No dangerous good in sense of this transport regulation.

UN proper shipping name:

No dangerous good in sense of this transport regulation.

Transport hazard class(es):

No dangerous good in sense of this transport regulation.

Packing group:

No dangerous good in sense of this transport regulation.

Inland waterways transport (ADN)
UN number or ID number:

No dangerous good in sense of this transport regulation.

Transport hazard class(es):

No dangerous good in sense of this transport regulation.

Packing group:

No dangerous good in sense of this transport regulation.

Marine transport (IMDG)
UN number or ID number:

No dangerous good in sense of this transport regulation.

Transport hazard class(es):

No dangerous good in sense of this transport regulation.

UV Adhesive VERIFIX B 665-0

Revision date: 06/22/2023

Product code: BO5209300

Page 11 of 12

Packing group:	No dangerous good in sense of this transport regulation.
Air transport (ICAO-TI/IATA-DGR)	
UN number or ID number:	No dangerous good in sense of this transport regulation.
Transport hazard class(es):	No dangerous good in sense of this transport regulation.
Packing group:	No dangerous good in sense of this transport regulation.

15. Regulatory information
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, Entry 75

2004/42/EC (VOC):	0 %
	0 g/l

National regulatory information

Employment restrictions:	Observe employment restrictions for young people.
Water hazard class (D):	2 - obviously hazardous to water

Chemical Safety Assessment

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

16. Other information
Changes

This data sheet contains changes from the previous version in section(s): 2,9.

Classification for mixtures and used evaluation method according to GHS

Classification	Classification procedure
Skin Irrit. 2; H315	Calculation method
Eye Dam. 1; H318	Calculation method
Skin Sens. 1; H317	Calculation method
STOT SE 3; H335	Calculation method
Aquatic Acute 1; H400	Calculation method
Aquatic Chronic 1; H410	Calculation method

Relevant H statements (full text)

H226	Flammable liquid and vapor
H242	Heating may cause a fire
H302	Harmful if swallowed
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
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects
H412	Harmful to aquatic life with long lasting effects
EUH208	Contains 3-methoxysilylpropyl methacrylate. May produce an allergic reaction.

Other data

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

UV Adhesive VERIFIX B 665-0

Revision date: 06/22/2023

Product code: BO5209300

Page 12 of 12

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