

VERIFIX 2K-60 Comp.B

Revision date: 07/05/2023

Product code: BO5500540B

Page 1 of 10

1. Identification**Product identifier**

VERIFIX 2K-60 Comp.B

Further trade names

BO 5500540 = 25ml BO 5500540A + 25 ml BO 5500540B

Product group: Zulieferprodukt

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

adhesive

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**

Flam. Liq. 2; H225
Skin Corr. 1A; H314
Eye Dam. 1; H318
Skin Sens. 1; H317
STOT SE 3; H335

Full text of hazard statements: see SECTION 16.

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

Methyl methacrylate
2-hydroxyethyl methacrylate
2-methylpropenoic acid, methacrylic acid
1-Benzoyl-2-ethylimidazol

Signal word: Danger

VERIFIX 2K-60 Comp.B

Revision date: 07/05/2023

Product code: BO5500540B

Page 2 of 10

Pictograms:

Hazard statements

H225	Highly flammable liquid and vapor
H314	Causes severe skin burns and eye damage
H317	May cause an allergic skin reaction
H335	May cause respiratory irritation

Precautionary statements

P210	Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P261	Avoid breathing dust/fume/gas/mist/vapors/spray.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P304+P340	If inhaled: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338	If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

3. Composition/information on ingredients
Mixtures
Chemical characterization

Methacrylate/Acrylate resin(s).

Hazardous components

CAS No	Components			Quantity
	EC No	Index No	REACH No	
	Classification (Regulation (EC) No 1272/2008)			
80-62-6	Methyl methacrylate			<50 %
	201-297-1	607-035-00-6	01-2119452498-28	
	Flam. Liq. 2, Skin Irrit. 2, Skin Sens. 1, STOT SE 3; H225 H315 H317 H335			
868-77-9	2-hydroxyethyl methacrylate			< 50 %
	212-782-2	607-124-00-X	01-2119490169-29	
	Skin Irrit. 2, Eye Irrit. 2, Skin Sens. 1; H315 H319 H317			
79-41-4	2-methylpropenoic acid, methacrylic acid			<20 %
	201-204-4	607-088-00-5	01-2119463884-26	
	Acute Tox. 4, Acute Tox. 4, Skin Corr. 1A; H312 H302 H314			
614-23-3	Benzoyl Thiourea			<10 %
	Acute Tox. 4; H302			
	1-Benzoyl-2-ethylimidazol			<3 %
	Eye Dam. 1, Skin Sens. 1, Aquatic Chronic 3; H318 H317 H412			

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

VERIFIX 2K-60 Comp.B

Revision date: 07/05/2023

Product code: BO5500540B

Page 3 of 10

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Components	Quantity
		Specific Conc. Limits, M-factors and ATE	
80-62-6	201-297-1	Methyl methacrylate inhalation: LC50 = 78 mg/l (vapours); dermal: LD50 = >5000 mg/kg; oral: LD50 = 7900 mg/kg	<50 %
868-77-9	212-782-2	2-hydroxyethyl methacrylate dermal: LD50 = >5000 mg/kg; oral: LD50 = 5050 mg/kg	< 50 %
79-41-4	201-204-4	2-methylpropenoic acid, methacrylic acid inhalation: LC50 = >3,6 mg/l (dusts or mists); dermal: ATE = 1100 mg/kg; oral: LD50 = 1320 mg/kg STOT SE 3; H335: >= 1 - 100	<20 %
614-23-3		Benzoyl Thiourea oral: ATE = 500 mg/kg	<10 %

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, dry powder, foam, carbon dioxide (CO₂)

Unsuitable extinguishing media

Full water jet

Specific hazards arising from the chemical

Carbon monoxide, nitrogen oxides (NO_x)

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

VERIFIX 2K-60 Comp.B

Revision date: 07/05/2023

Product code: BO5500540B

Page 4 of 10

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
Exposure limits

CAS No	Substance	ppm	mg/m ³	f/cc	Category	Origin
79-41-4	Methacrylic acid	20	70		TWA (8 h)	REL
80-62-6	Methyl methacrylate	100	410		TWA (8 h)	PEL
		100	410		TWA (8 h)	REL

Exposure controls

VERIFIX 2K-60 Comp.B

Revision date: 07/05/2023

Product code: BO5500540B

Page 5 of 10

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)

9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state:	Liquid
Color:	pink
Odor:	characteristic
Boiling point or initial boiling point and boiling range:	101 °C
Flash point:	10 °C
Viscosity / kinematic: (at 23 °C)	5000 mm ² /s
Water solubility:	not determined
Vapor pressure: (at 20 °C)	47 hPa
Density (at 25 °C):	1 g/cm ³

Other information

Information with regard to physical hazard classes

Explosive properties
None.

Other safety characteristics

Solvent content:	0,0%
Solid content:	100%
Viscosity / dynamic: (at 25 °C)	5000 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.

VERIFIX 2K-60 Comp.B

Revision date: 07/05/2023

Product code: BO5500540B

Page 6 of 10

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
Acute toxicity

CAS No	Components				
	Exposure route	Dose	Species	Source	Method
80-62-6	Methyl methacrylate				
	oral	LD50 mg/kg 7900	Rat		
	dermal	LD50 mg/kg >5000	Rabbit	OECD 402	
	inhalation (4 h) vapour	LC50 78 mg/l	Rat		
868-77-9	2-hydroxyethyl methacrylate				
	oral	LD50 mg/kg 5050	Rat		
	dermal	LD50 mg/kg >5000	Rabbit		
79-41-4	2-methylpropenoic acid, methacrylic acid				
	oral	LD50 mg/kg 1320	Rat		OECD 401
	dermal	ATE mg/kg 1100			
	inhalation (4 h) dust/mist	LC50 >3,6 mg/l	Rat		OECD 403
614-23-3	Benzoyl Thiourea				
	oral	ATE mg/kg 500			

12. Ecological information
Ecotoxicity

VERIFIX 2K-60 Comp.B

Revision date: 07/05/2023

Product code: BO5500540B

Page 7 of 10

CAS No	Components					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
80-62-6	Methyl methacrylate					
	Acute fish toxicity	LC50	283 mg/l	96 h	Lepomis macrochirus (Bluegill)	
	Acute algae toxicity	ErC50	110 mg/l	72 h	Pseudokirchneriella subcapitata	OECD 201
	Acute crustacea toxicity	EC50	69 mg/l	48 h	Daphnia magna (Big water flea)	
868-77-9	2-hydroxyethyl methacrylate					
	Acute fish toxicity	LC50	227 mg/l	96 h	Pimephales promelas	
79-41-4	2-methylpropenoic acid, methacrylic acid					
	Acute fish toxicity	LC50	100-180 mg/l	96 h	Danio rerio (zebrafish)	OECD 203
	Acute crustacea toxicity	EC50	>130 mg/l	48 h	Daphnia magna (Big water flea)	OECD 202

CAS No	Components			
	Method	Value	d	Source
	Evaluation			
80-62-6	Methyl methacrylate			
	aerob	94%	14	
	Readily biodegradable (according to OECD criteria).			
79-41-4	2-methylpropenoic acid, methacrylic acid			
	OECD 301D	86%		
	Readily biodegradable (according to OECD criteria).			

Partition coefficient n-octanol/water

CAS No	Components	Log Pow
80-62-6	Methyl methacrylate	1,38
868-77-9	2-hydroxyethyl methacrylate	0,47

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

VERIFIX 2K-60 Comp.B

Revision date: 07/05/2023

Product code: BO5500540B

Page 8 of 10

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: UN 1133
UN proper shipping name: Adhesives (Methyl methacrylate, 2-methylpropenoic acid, methacrylic acid)
Transport hazard class(es): 3
Packing group: III
 Hazard label: 3



Classification Code: F1
 Limited quantity: 5 L
 Excepted quantity: E1
 Transport category: 3
 Tunnel restriction code: E

Inland waterways transport (ADN)

UN number or ID number: UN 1133
UN proper shipping name: Adhesives (Methyl methacrylate, 2-methylpropenoic acid, methacrylic acid)
Transport hazard class(es): 3
Packing group: III
 Hazard label: 3



Classification Code: F1
 Limited quantity: 5 L
 Excepted quantity: E1

Marine transport (IMDG)

UN number or ID number: UN 1133
UN proper shipping name: Adhesives (Methyl methacrylate, Methacrylic acid)
Transport hazard class(es): 3
Packing group: III
 Hazard label: 3



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

Air transport (ICAO-TI/IATA-DGR)

UN number or ID number: UN 1133

VERIFIX 2K-60 Comp.B

Revision date: 07/05/2023

Product code: BO5500540B

Page 9 of 10

UN proper shipping name: Adhesives (Methyl methacrylate, Methacrylic acid)
Transport hazard class(es): 3
Packing group: III
 Hazard label: 3



Special Provisions: A3
 Limited quantity Passenger: 10 L
 Passenger LQ: Y344
 Excepted quantity: E1
 IATA-packing instructions - Passenger: 355
 IATA-max. quantity - Passenger: 60 L
 IATA-packing instructions - Cargo: 366
 IATA-max. quantity - Cargo: 220 L

Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

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): 1,2.

Classification for mixtures and used evaluation method according to GHS

Classification	Classification procedure
Flam. Liq. 2; H225	On basis of test data
Skin Corr. 1A; H314	Calculation method
Eye Dam. 1; H318	Calculation method
Skin Sens. 1; H317	Calculation method
STOT SE 3; H335	Calculation method

Relevant H statements (full text)

H225 Highly flammable liquid and vapor
 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

VERIFIX 2K-60 Comp.B

Revision date: 07/05/2023

Product code: BO5500540B

Page 10 of 10

H318	Causes serious eye damage
H319	Causes serious eye irritation
H335	May cause respiratory irritation
H412	Harmful to aquatic life with long lasting effects

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 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.)