

UV adhesive VERIFIX B 690-0

Revision date: 05/04/2022

Product code: BO5209370

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1. Identification**Product identifier**

UV adhesive VERIFIX B 690-0

Further trade names

BO 5209370, 85 g

BO 5209372, 1000 g / BO 5209372S, Spacer, 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: | 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 Irrit. 2; H319
Skin Sens. 1; H317
STOT SE 3; H335
Aquatic Chronic 3; H412

Full text of hazard statements: see SECTION 16.

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

2-ethylhexyl methacrylate
2-hydroxyethyl methacrylate
Methyl methacrylate

Signal word: Warning

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Pictograms:

Hazard statements

| | |
|------|-------------------------------------|
| H315 | Causes skin irritation |
| H319 | Causes serious eye irritation |
| H317 | May cause an allergic skin reaction |
| H335 | May cause respiratory irritation |

Precautionary statements

| | |
|-----------|--|
| P261 | Avoid breathing dust/fume/gas/mist/vapors/spray. |
| P280 | Wear protective gloves/protective clothing/eye protection/face protection. |
| P302+P352 | If on skin: Wash with plenty of water. |
| P333+P313 | If skin irritation or rash occurs: Get medical advice/attention. |
| P362+P364 | Take off contaminated clothing and wash it before reuse. |

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) | | | |
| 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 | | | |
| 80-62-6 | Methyl methacrylate | | | <1 % |
| | 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 | | | |

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

Specific Conc. Limits, M-factors and ATE

| CAS No | EC No | Components | 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 | |
| 80-62-6 | 201-297-1 | Methyl methacrylate | <1 % |
| | | inhalation: LC50 = 78 mg/l (vapours); dermal: LD50 = >5000 mg/kg; oral: LD50 = 7900 mg/kg | |

4. First-aid measures
Description of first aid measures

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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

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**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

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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 |
|---------|---------------------|-----|-------------------|------|-----------|--------|
| 80-62-6 | Methyl methacrylate | 100 | 410 | | TWA (8 h) | PEL |
| | | 100 | 410 | | TWA (8 h) | REL |

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)

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

| | |
|-----------------|----------------|
| Physical state: | Liquid |
| Color: | colorless |
| Odor: | characteristic |

Test method
Changes in the physical state

| | |
|------------------------------------|-----------------------|
| Flash point: | >100 °C |
| pH-Value (at 21 °C): | 4 5% emulsion |
| Viscosity / dynamic: (at 23 °C) | 600 mPa·s |
| Water solubility: | insoluble |
| Density (at 20 °C): | 1,1 g/cm ³ |

Other information
Other safety characteristics

| | |
|------------------|----|
| Solvent content: | 0% |
|------------------|----|

Further Information
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

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Acute toxicity

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

12. Ecological information

| 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 | |
| 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) | |

| CAS No | Components | | | | |
|----------|---|-------|----|--------|--|
| | 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). | | | | |
| 80-62-6 | Methyl methacrylate | | | | |
| | aerob | 94% | 14 | | |
| | Readily biodegradable (according to OECD criteria). | | | | |

Partition coefficient n-octanol/water

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

Results of PBT and vPvB assessment

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

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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

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 75

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

National regulatory information

Employment restrictions: Observe employment restrictions for young people.
Water hazard class (D): 1 - slightly 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.

Classification for mixtures and used evaluation method according to GHS

| 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 |

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Relevant H statements (full text)

| | |
|------|---|
| H225 | Highly flammable liquid and vapor |
| H315 | Causes skin irritation |
| H317 | May cause an allergic skin reaction |
| 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.)