

according to Regulation (EC) No 1907/2006

UV adhesive VERIFIX 420 VIS

Revision date: 07.06.2017

Product code: BO420VI10

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SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

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Further trade names

BO 420VI10, 100 g

BO 420VI25, 250 g

BO 420VI1K, 1000 g

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:	Klaus Nehren	Telephone: +49 2129 5568-276
e-mail:	MSDS@bohle.de	
Internet:	www.bohle-group.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**

Hazard categories:

Acute toxicity: Acute Tox. 4

Skin corrosion/irritation: Skin Corr. 1C

Serious eye damage/eye irritation: Eye Dam. 1

Respiratory or skin sensitisation: Skin Sens. 1

Hazardous to the aquatic environment: Aquatic Chronic 2

Hazard Statements:

Harmful if swallowed.

Causes severe skin burns and eye damage.

Causes serious eye damage.

May cause an allergic skin reaction.

Toxic to aquatic life with long lasting effects.

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

Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl acrylate

N,N-dimethylacrylamide

2-hydroxyethyl methacrylate

Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide

Signal word: Danger

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Pictograms:**Hazard statements**

H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H317	May cause an allergic skin reaction.
H411	Toxic to aquatic life with long lasting effects.

Precautionary statements

P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
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.

SECTION 3: Composition/information on ingredients**3.2. Mixtures****Chemical characterization**

Methacrylate/Acrylate resin(s).

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Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification according to Regulation (EC) No. 1272/2008 [CLP]			
2680-03-7	N,N-dimethylacrylamide			< 30%
	220-237-5		01-2119971262-39	
	Acute Tox. 3, Acute Tox. 3, Eye Dam. 1; H301 H311 H318			
2399-48-6	Tetrahydrofurfuryl acrylate			< 30%
	219-268-7			
	Skin Corr. 1C, Eye Irrit. 2; H314 H319			
5888-33-5	Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl acrylate			< 30%
	227-561-6			
	Skin Irrit. 2, Eye Irrit. 2, Skin Sens. 1, STOT SE 3, Aquatic Acute 1 (M-Factor = 1), Aquatic Chronic 1 (M-Factor = 1); H315 H319 H317 H335 H400 H410			
868-77-9	2-hydroxyethyl methacrylate			< 5%
	212-782-2	607-124-00-X	01-2119490169-29	
	Skin Irrit. 2, Eye Irrit. 2, Skin Sens. 1; H315 H319 H317			
75980-60-8	Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide			< 3%
	278-355-8	015-203-00-X		
	Repr. 2, Skin Sens. 1B, Aquatic Acute 2, Aquatic Chronic 2; H361f H317 H401 H411			
123-31-9	Hydroquinone			> 1%
	204-617-8	604-005-00-4		
	Carc. 2, Muta. 2, Acute Tox. 4, Eye Dam. 1, Skin Sens. 1, Aquatic Acute 1 (M-Factor = 10); H351 H341 H302 H318 H317 H400			

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

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.

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SECTION 5: Firefighting measures**5.1. Extinguishing media****Suitable extinguishing media**Water spray jet, Extinguishing powder, Foam, Carbon dioxide (CO₂)**Unsuitable extinguishing media**

High power water jet

5.2. Special hazards arising from the substance or mixtureBurning produces irritant fumes. Carbon monoxide, Carbon dioxide, Hydrocarbons, Nitrogen oxides (NO_x)**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**

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

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.

Advice on protection against fire and explosion

No special technical protective measures required.

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.

7.3. Specific end use(s)

adhesive

SECTION 8: Exposure controls/personal protection**8.1. Control parameters**

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Exposure limits (EH40)

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
123-31-9	Hydroquinone	-	0.5		TWA (8 h)	WEL
		-	-		STEL (15 min)	WEL

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

Protective and hygiene measures

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.

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 (DIN 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
Changes in the physical state

Flash point: >100 °C
Density (at 20 °C): 1,1 g/cm³
Water solubility: insoluble
Viscosity / dynamic:
(at 25 °C) 300 mPa·s
Solvent content: 0%

SECTION 10: Stability and reactivity
10.1. Reactivity

Light / UV-radiation/sunlight
Oxidising agent, strong

10.2. Chemical stability

Stable under recommended storage conditions.

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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 (CO₂), Hydrocarbons

SECTION 11: Toxicological information

11.1. Information on toxicological effects

ATEmix calculated

ATE (oral) 716,7 mg/kg; ATE (dermal) 1730,0 mg/kg

Acute toxicity

CAS No	Chemical name					
	Exposure route	Dose		Species	Source	Method
2680-03-7	N,N-dimethylacrylamide					
	oral	LD50 mg/kg	215-464	Rat	OECD 401	
	dermal	LD50 mg/kg	519	Rabbit		
868-77-9	2-hydroxyethyl methacrylate					
	oral	LD50 mg/kg	5564	Rat		
	dermal	LD50 mg/kg	>5000	Rabbit		
123-31-9	Hydroquinone					
	oral	LD50 mg/kg	302	Rat	IUCLID	

SECTION 12: Ecological information

12.1. Toxicity

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CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
2680-03-7	N,N-dimethylacrylamide					
	Acute fish toxicity	LC50 >120 mg/l	96 h	Oncorhynchus mykiss (Rainbow trout)	OECD 203	
	Acute algae toxicity	ErC50 >400 mg/l	72 h	Pseudokirchneriella subcapitata	OECD 201	
	Acute crustacea toxicity	EC50 >120 mg/l	48 h	Daphnia magna (Big water flea)	OECD 202	
	Acute bacteria toxicity	(>1000 mg/l)			OECD 209	
868-77-9	2-hydroxyethyl methacrylate					
	Acute fish toxicity	LC50 227 mg/l	96 h	Pimephales promelas		
123-31-9	Hydroquinone					
	Acute fish toxicity	LC50 0,44 mg/l	96 h	Pimephales promelas	IUCLID	
	Acute algae toxicity	ErC50 0,335 mg/l	72 h	Selenastrum capricornutum	IUCLID	
	Acute crustacea toxicity	EC50 0,29 mg/l	48 h	Daphnia magna		

12.3. Bioaccumulative potential
Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
2680-03-7	N,N-dimethylacrylamide	<=4
868-77-9	2-hydroxyethyl methacrylate	0,47

SECTION 13: Disposal considerations
13.1. Waste treatment methods
Advice on disposal

Consult the appropriate local waste disposal expert about waste disposal.

Waste disposal number of waste from 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
Classified as hazardous waste.

Waste disposal number of 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
Classified as hazardous waste.

Waste disposal number of 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
Classified as hazardous waste.

Contaminated packaging

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

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SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number: UN 1760
14.2. UN proper shipping name: CORROSIVE LIQUID, N.O.S. Tetrahydrofurfuryl acrylate
14.3. Transport hazard class(es): 8
14.4. Packing group: III
 Hazard label: 8



Classification code: C9
 Special Provisions: 274
 Limited quantity: 5 L
 Excepted quantity: E1
 Transport category: 3
 Hazard No: 80
 Tunnel restriction code: E

Inland waterways transport (ADN)

14.1. UN number: UN 1760
14.2. UN proper shipping name: CORROSIVE LIQUID, N.O.S. Tetrahydrofurfuryl acrylate
14.3. Transport hazard class(es): 8
14.4. Packing group: III
 Hazard label: 8



Classification code: C9
 Special Provisions: 274
 Limited quantity: 5 L
 Excepted quantity: E1

Marine transport (IMDG)

14.1. UN number: UN 1760
14.2. UN proper shipping name: CORROSIVE LIQUID, N.O.S. Tetrahydrofurfuryl acrylate
14.3. Transport hazard class(es): 8
14.4. Packing group: III
 Hazard label: 8



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

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number: UN 1760
14.2. UN proper shipping name: CORROSIVE LIQUID, N.O.S. Tetrahydrofurfuryl acrylate

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14.3. Transport hazard class(es):

8

14.4. Packing group:

III

Hazard label:

8



Special Provisions:

A3 A803

Limited quantity Passenger:

1 L

Passenger LQ:

Y841

Excepted quantity:

E1

IATA-packing instructions - Passenger:

852

IATA-max. quantity - Passenger:

5 L

IATA-packing instructions - Cargo:

856

IATA-max. quantity - Cargo:

60 L

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS:

yes



Danger releasing substance:

Isobornylacrylate, Diphenyl(2,4,6-trimethylbenzoyl)phosphin oxide

SECTION 15: Regulatory information

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

National regulatory information

Employment restrictions:

Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC).

Water contaminating class (D):

1 - slightly water contaminating

15.2. Chemical safety assessment

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

SECTION 16: Other information

Relevant H and EUH statements (number and full text)

- H301 Toxic if swallowed.
- H302 Harmful if swallowed.
- H311 Toxic 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.
- H335 May cause respiratory irritation.
- H341 Suspected of causing genetic defects.
- H351 Suspected of causing cancer.
- H361f Suspected of damaging fertility.
- H400 Very toxic to aquatic life.
- H401 Toxic to aquatic life.
- H410 Very toxic to aquatic life with long lasting effects.
- H411 Toxic 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

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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.)