

\* BÜFA®-VE-Tooling-Gelcoat-H-XXXX (COLOURED)

Date revised: 01.09.2017

# 7202XXXX

Version: 1 / GB

Master No. M-401

Print date: 16.01.18

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

### **1.1. Product identifier**

#### **Trade name**

BÜFA®-VE-Tooling-Gelcoat-H-XXXX (COLOURED)

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

#### **Use of the substance/mixture**

Purpose of use: Raw substance formulas for manufacturing shaped parts from unsaturated polyester / vinyl ester resins.

### **1.3. Details of the supplier of the safety data sheet**

#### **Address**

BÜFA Composite Systems

GmbH &amp; Co. KG Hohe Looe 2-8

Hohe Looe 2-8

26180 Rastede

Telephone no. +49 4402 975-0

Fax no. +49 4402 975-400

Information provided Department product safety / +49 4402 975-415

by / telephone

E-Mail produktsicherheit-compositesystems@buefa.de

### **1.4. Emergency telephone number**

Euroresins UK LTD.: +44 151 34 88 800

## **SECTION 2: Hazards identification**

### **2.1. Classification of the substance or mixture**

#### **Classification (Regulation (EC) No. 1272/2008)**

Flam. Liq. 3 H226

Acute Tox. 4 H332

Skin Irrit. 2 H315

Eye Irrit. 2 H319

Repr. 2 H361d

STOT SE 3 H335

STOT RE 1 H372

Aquatic Chronic 3 H412

Organs: Ear; Route of exposure: inhalative

The product is classified and labelled in accordance with Regulation (EC) No 1272/2008

For explanation of abbreviations see section 16.

### **2.2. Label elements**

#### **Labelling according to regulation (EC) No 1272/2008**

#### **Hazard pictograms**



#### **Signal word**

Danger

#### **Hazard statements**

H226 Flammable liquid and vapour.

H332 Harmful if inhaled.

H315 Causes skin irritation.

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H319	Causes serious eye irritation.
H361d	Suspected of damaging the unborn child.
H335	May cause respiratory irritation.
H372	Causes damage to organs through prolonged or repeated exposure: Ear; Route of exposure: inhalative
H412	Harmful to aquatic life with long lasting effects.

**Sensitising substances**

EUH208 Contains	cobalt bis(2-ethylhexanoate)
EUH208 Contains	Octabenzene
May produce an allergic reaction.	

**Precautionary statements**

P210.9	Keep away from sparks, open flames and other ignition sources. No smoking.
P260.8	Do not breathe vapours/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.
P308+P313	IF exposed or concerned: Get medical advice/attention.

**Hazardous component(s) to be indicated on label (Regulation (EC) No. 1272/2008)**

contains	Styrene;2-Phenylpropene
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**2.3. Other hazards**

The product does not contain PBT/vPvB-substances.

**SECTION 3: Composition/information on ingredients****3.2. Mixtures****Hazardous ingredients****Styrene**

CAS No.	100-42-5				
EINECS no.	202-851-5				
Registration no.	01-2119457861-32-XXXX				
Concentration	>= 30	< 50	%		
Flam. Liq. 3	H226				
Skin Irrit. 2	H315				
Acute Tox. 4	H332				
Eye Irrit. 2	H319				
STOT SE 3	H335				
STOT RE 1	H372	Organs: Ear; Route of exposure: inhalative			
Asp. Tox. 1	H304				
Repr. 2	H361d				
Aquatic Chronic 3	H412				

**2-Phenylpropene**

CAS No.	98-83-9				
EINECS no.	202-705-0				
Registration no.	01-2119472426-35-XXXX				
Concentration	>= 1	< 2,5	%		
Flam. Liq. 3	H226				
Eye Irrit. 2	H319				
STOT SE 3	H335				
Aquatic Chronic 2	H411				

STOT SE 3 H335 >= 25

**cobalt bis(2-ethylhexanoate)**

CAS No.	136-52-7
EINECS no.	205-250-6

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Registration no.	01-2119524678-29				
Concentration	>= 0,1	<	1	%	
Repr. 2	H361f				
Skin Sens. 1	H317				
Eye Irrit. 2	H319				
Aquatic Acute 1	H400				
Aquatic Chronic 3	H412				

**Octabenzone**

CAS No.	1843-05-6				
EINECS no.	217-421-2				
Registration no.	01-2119557833-30-0000				
Concentration	>= 0,1	<	1	%	
Skin Sens. 1	H317				
Aquatic Chronic 3	H412				

Complete text of hazard statements in chapter 16

**SECTION 4: First aid measures****4.1. Description of first aid measures****General information**

Adhere to personal protective measures when giving first aid. Remove soiled or soaked clothing immediately, do not allow to dry.

**After inhalation**

Remove the casualty into fresh air and keep him calm. Irregular breathing/no breathing: artificial respiration. In the event of symptoms take medical treatment.

**After skin contact**

Wash off immediately with soap and water.

**After eye contact**

In case of contact with the eyes, rinse immediately for at least 15 minutes with plenty of water. Seek medical advice immediately. Remove contact lenses

**After ingestion**

Rinse mouth thoroughly with water. Summon a doctor immediately. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. If individual is drowsy or unconscious place in recovery position (on left side, with head down).

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

The following symptoms may occur: Headache, Dizziness, Nausea

**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**

Alcohol-resistant foam, Dry powder, Carbon dioxide

**Non suitable extinguishing media**

Full water jet

**5.2. Special hazards arising from the substance or mixture**

In case of combustion evolution of dangerous gases possible. In the event of fire the following can be released: Carbon monoxide (CO); Nitrogen oxides (NOx); dense black smoke

**5.3. Advice for firefighters**

Use self-contained breathing apparatus.

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Collect contaminated fire-fighting water separately, must not be discharged into the drains.

## **SECTION 6: Accidental release measures**

### **6.1. Personal precautions, protective equipment and emergency procedures**

Avoid contact with skin, eyes and clothing. Use personal protective clothing. Keep away sources of ignition. Ensure adequate ventilation. Use breathing apparatus if exposed to vapours/dust/aerosol.

### **6.2. Environmental precautions**

Do not allow to enter drains or waterways. Do not discharge into the subsoil/soil. Prevent spread over a wide area (e.g. by containment or oil barriers).

### **6.3. Methods and material for containment and cleaning up**

Pick up with absorbent material (eg sand, kieselgur, acid binder, universal binder, sawdust). When picked up, treat material as prescribed under Section 13 "Disposal".

### **6.4. Reference to other sections**

Information regarding Safe handling, see Section 7. Information regarding personal protective measures, see Section 8. Information regarding waste disposal, see Section 13.

## **SECTION 7: Handling and storage**

### **7.1. Precautions for safe handling**

Provide good ventilation of working area (local exhaust ventilation if necessary). Observe the usual precautions for handling chemicals.

Keep away from sources of ignition - No smoking. Take precautionary measures against static discharge. Vapours can form an explosive mixture with air.

### **7.2. Conditions for safe storage, including any incompatibilities**

Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Keep container tightly closed and dry in a cool, well-ventilated place. Protect from heat and direct sunlight.

### **7.3. Specific end use(s)**

No information available

## **SECTION 8: Exposure controls/personal protection**

### **8.1. Control parameters**

#### **Exposure limit values**

##### **2-Phenylpropene**

List	EH40			
Type	WEL			
Value	246	mg/m <sup>3</sup>	50	ppm(V)
Short term exposure limit	491	mg/m <sup>3</sup>	100	ppm(V)
Maximum limit value; Skin resorption / sensibilisation: Pregnancy group: Status: 2011				

##### **Styrene**

List	EH40			
Type	WEL			
Value	430	mg/m <sup>3</sup>	100	ppm(V)
Short term exposure limit	1080	mg/m <sup>3</sup>	250	ppm(V)
Maximum limit value; Skin resorption / sensibilisation: Pregnancy group: Status: 2011				

#### **Derived No/Minimal Effect Levels (DNEL/DMEL)**

##### **Styrene**

Reference substance	Styrene			
DNEL				
Conditions	Worker	Acute	inhalative	Systemic effects
Concentration	289	mg/m <sup>3</sup>		
DNEL				

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Conditions Concentration	Worker 85	Long term mg/m <sup>3</sup>	inhalative	Systemic effects
DNEL Conditions Concentration	Worker 306	Acute mg/m <sup>3</sup>	inhalative	Local effects
DNEL Conditions Concentration	Worker 406	Long term mg/kg/d	dermal	Systemic effects

**8.2. Exposure controls****Appropriate engineering controls**

Use only in well ventilated areas.

Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

**General protective and hygiene measures**

Provide good ventilation of working area (local exhaust ventilation if necessary). Avoid contact with skin and eyes. Do not inhale gases/vapours/aerosols.

**Respiratory protection**

If workplace limits are exceeded, a respiratory protection approved for this particular job must be worn.

Short term: filter apparatus, Filter A

**Hand protection**

Chemical resistant gloves

Appropriate Material

Butyl rubber

Material thickness

0,7 mm

Breakthrough time

= 30 min

**Eye protection**

Tightly fitting safety glasses

**Body protection**

Clothing as usual in the chemical industry.

**SECTION 9: Physical and chemical properties****9.1. Information on basic physical and chemical properties**

Form	liquid
Colour	depends on recipe, cloudy
Odour	of styrene
Flash point	
Value	32 °C
Efflux time	
Value	> 61 s
Method	DIN EN ISO 2431 - 6 mm
Density	
Value	1,15-1,25 g/cm <sup>3</sup>
Temperature	20 °C

**9.2. Other information**

No information available.

**SECTION 10: Stability and reactivity****10.1. Reactivity**

No hazardous reactions when stored and handled according to prescribed instructions.

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**10.2. Chemical stability**

The product is stable.

**10.3. Possibility of hazardous reactions**

Under normal conditions of storage and use, hazardous reactions will not occur.

**10.4. Conditions to avoid**

Protect from heat and direct sunlight.

**10.5. Incompatible materials**

Reactions with peroxides and other radical components.

**10.6. Hazardous decomposition products**

No hazardous decomposition products known.

**SECTION 11: Toxicological information****11.1. Information on toxicological effects****Acute oral toxicity**

Based on available data, the classification criteria are not met.

**Acute dermal toxicity**

Based on available data, the classification criteria are not met.

**Acute inhalational toxicity**

ATE	35,32	mg/l
Administration/Form	Vapors	
Method	calculated value (Regulation (EC) No. 1272/2008)	
ATE	4,49	mg/l
Administration/Form	Dust/Mist	
Method	calculated value (Regulation (EC) No. 1272/2008)	
The classification criteria are met.		

**Skin corrosion/irritation**

evaluation irritant  
The classification criteria are met.

**Serious eye damage/irritation**

evaluation irritant  
The classification criteria are met.

**Sensitization**

Based on available data, the classification criteria are not met.

**Sensitization (Components)****Styrene**

evaluation non-sensitizing

**Mutagenicity**

Based on available data, the classification criteria are not met.

**Carcinogenicity**

Based on available data, the classification criteria are not met.

**Reproductive toxicity**

evaluation Suspected of damaging the unborn child.  
The classification criteria are met.

**Specific Target Organ Toxicity (STOT)****Single exposure**

The classification criteria are met.  
evaluation May cause respiratory irritation.

**Repeated exposure**

The classification criteria are met.  
evaluation Causes damage to organs through prolonged or repeated exposure

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**Aspiration hazard**

Based on available data, the classification criteria are not met.

**Other information**

Inhalation of the vapours causes irritation of the respiratory tract and mucous membrane, headaches, nausea, giddiness, vomiting.

**SECTION 12: Ecological information****12.1. Toxicity****Fish toxicity****Styrene**

LC/EC/IC50 &gt; 1,0 to 10 mg/l

**Daphnia toxicity****Styrene**Species Daphnia magna  
LC/EC/IC50 > 1,0 to 10 mg/l**Algae toxicity****Styrene**

LC/EC/IC50 &gt; 1,0 to 10 mg/l

**Bacteria toxicity**

No toxicological data are available.

**12.2. Persistence and degradability**

For this subsection there is no ecotoxicological data available on the product as such.

**Biodegradability****Styrene**

evaluation Readily biodegradable (according to OECD criteria)

**12.3. Bioaccumulative potential**

For this subsection there is no ecotoxicological data available on the product as such.

**12.4. Mobility in soil**

For this subsection there is no ecotoxicological data available on the product as such.

**12.5. Results of PBT and vPvB assessment**

The product does not contain PBT/vPvB-substances.

**12.6. Other adverse effects**

For this subsection there is no ecotoxicological data available on the product as such.

**SECTION 13: Disposal considerations****13.1. Waste treatment methods****Disposal recommendations for the product**

EWC waste code 07 02 08\* other still bottoms and reaction residues

The listed waste code numbers, according to the European Waste Catalogue (EWC), are to be understood as a recommendation. A final decision must be made in agreement with the regional waste disposal company.

**Disposal recommendations for packaging**

Packaging that cannot be cleaned should be disposed off as product waste.

**SECTION 14: Transport information****Land transport ADR/RID****14.1. UN number**

UN number 1866



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**14.2. UN proper shipping name**

RESIN SOLUTION

**14.3. Transport hazard class(es)**

Class 3

**14.4. Packing group**

Packing group III

Remarks Viscous product: Transport according to paragraph 2.2.3.1.5 ADR/RID

Tunnel restriction code D/E

**Marine transport IMDG/GGVSee****14.1. UN number**

UN number 1866

**14.2. UN proper shipping name**

RESIN SOLUTION

**14.3. Transport hazard class(es)**

Class 3

**14.4. Packing group**

Packing group III

Remarks Transport according to 2.3.2.5 of the IMDG Code

EmS F-E, S-E

**SECTION 15: Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****VOC**

VOC (EU) 2,52 %

**Major-accident categories acc. 2012/18/EU**

Category P5c FLAMMABLE LIQUID

**Other information**

The product does not contain substances of very high concern (SVHC).

**15.2. Chemical safety assessment**

No information available

**SECTION 16: Other information****Hazard statements listed in Chapter 3**

H226 Flammable liquid and vapour.  
H304 May be fatal if swallowed and enters airways.  
H315 Causes skin irritation.  
H317 May cause an allergic skin reaction.  
H319 Causes serious eye irritation.  
H332 Harmful if inhaled.  
H335 May cause respiratory irritation.  
H361d Suspected of damaging the unborn child.  
H361f Suspected of damaging fertility.  
H372 Causes damage to organs through prolonged or repeated exposure:  
H400 Very toxic to aquatic life.  
H411 Toxic to aquatic life with long lasting effects.  
H412 Harmful to aquatic life with long lasting effects.

**Abbreviations**

CAS: Chemical Abstracts Service  
EAK: Europäischer Abfallkatalog  
EINECS: European Inventory of Existing Commercial Chemical Substances  
PBT: Persistent, Bioaccumulative and Toxic  
vPvB: Very persistent and very bioaccumulative  
VOC: Volatile Organic Compound



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**CLP categories listed in Chapter 3**

Acute Tox. 4	Acute toxicity, Category 4
Aquatic Acute 1	Hazardous to the aquatic environment, acute, Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment, chronic, Category 2
Aquatic Chronic 3	Hazardous to the aquatic environment, chronic, Category 3
Asp. Tox. 1	Aspiration hazard, Category 1
Eye Irrit. 2	Eye irritation, Category 2
Flam. Liq. 3	Flammable liquid, Category 3
Repr. 2	Reproductive toxicity, Category 2
Skin Irrit. 2	Skin irritation, Category 2
Skin Sens. 1	Skin sensitization, Category 1
STOT RE 1	Specific target organ toxicity - repeated exposure, Category 1
STOT SE 3	Specific target organ toxicity - single exposure, Category 3

**Supplemental information**

Relevant changes compared with the previous version of the safety data sheet are marked with: \*\*\*  
This information is based on our present state of knowledge. However, it should not constitute a guarantee for any specific product properties and shall not establish a legally valid relationship.