

* BÜFA®-EcoShield 0701

Date revised: 09.12.2025

20607010240

Version: 1 / GB

Master No. M-408

Print date: 18.12.2025

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

1.1. Product identifier

Trade name

BÜFA®-EcoShield 0701

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 & Co. KG

Hohe Looge 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-bcs@buefa.de

1.4. Emergency telephone number

Giftzentrale Goettingen: +49 551 19240

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Skin Sens. 1 H317

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**

Warning

Hazard statements

H317 May cause an allergic skin reaction.

Precautionary statements

P261.9 Avoid breathing vapours/spray.

P272 Contaminated work clothing should not be allowed out of the workplace.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

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P333+P313

If skin irritation or rash occurs: Get medical advice/attention.

P362+P364

Take off contaminated clothing and wash it before reuse.

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

contains

tetramethylene dimethacrylate; Reaction products of 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)] bisoxirane with maleic anhydride and methacrylic acid

2.3. Other hazards

The product contains no PBT substances. The product contains no vPvB substances. This product does not contain a substance that has endocrine disrupting properties with respect to human. The product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms.

SECTION 3: Composition/information on ingredients**3.2. Mixtures****Hazardous ingredients****Reaction products of 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)] bisoxirane with maleic anhydride and methacrylic acid**

EINECS no.	701-427-1				
Concentration	>=	25	<	50	%
Skin Sens. 1	H317				

Vinyltoluene

CAS No.	25013-15-4				
EINECS no.	246-562-2				
Registration no.	01-2119622074-50-XXXX				
Concentration	>=	1	<	10	%
Flam. Liq. 3	H226				
Acute Tox. 4	H332				
Asp. Tox. 1	H304				
Skin Irrit. 2	H315				
Eye Irrit. 2	H319				
STOT SE 3	H335				

cATpE	inhalative, Dust/Mist	1,5	mg/l
cATpE	inhalative, Vapors	11	mg/l

tetramethylene dimethacrylate

CAS No.	2082-81-7				
EINECS no.	218-218-1				
Registration no.	01-2119967415-30				
Concentration	>=	1	<	10	%
Skin Sens. 1	H317				

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. In the event of symptoms take medical treatment.

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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.

After ingestion

Rinse out mouth and give plenty of water to drink. Seek medical advice immediately.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically

No special hazards have to be mentioned.

SECTION 5: Firefighting measures**5.1. Extinguishing media****Suitable extinguishing media**

Alcohol-resistant foam, Dry powder, Carbon dioxide, Water spray jet

Non suitable extinguishing media

None known

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)

5.3. Advice for firefighters

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.

6.2. Environmental precautions

Do not allow to enter drains or waterways. Do not discharge into the subsoil/soil.

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**

Observe the usual precautions for handling chemicals.

7.2. Conditions for safe storage, including any incompatibilities

Keep container tightly closed.

7.3. Specific end use(s)

No information available

SECTION 8: Exposure controls/personal protection**8.2. Exposure controls**

* BÜFA®-EcoShield 0701

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Version: 1 / GB

Master No. M-408

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General protective and hygiene measures

Observe the usual precautions for handling chemicals. Personal protective equipment must comply with the Regulation (EC) No 2016/425 and the resulting CEN standards.

Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment.

Hand protection

Chemical resistant gloves

Eye protection

Safety glasses with side protection shield

Body protection

Wear suitable protective clothing.

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

Form	liquid		
Colour	blueish		
Odour	characteristic		
Melting point			
Remarks	Not applicable		
Freezing point			
Remarks	Not applicable		
Boiling point			
Remarks	No data available		
Flammability			
Remarks	No data available		
Explosion limits			
Remarks	No data available		
Flash point			
Value	85,0		°C
Method	ISO 3679-B		
Auto-ignition temperature			
Remarks	No data available		
Thermal decomposition			
Remarks	No data available		
Self Accelerating Decomposition / Polymerization Temperature (SADT/SAPT)			
Remarks	Not applicable		
pH value			
Remarks	Not applicable		
Solubility in other solvents			
Remarks	No data available		
Octanol/water partition coefficient (log Pow)			
Remarks	No data available		
Vapour pressure			
Remarks	No data available		
Density			
Value	1,2900		g/cm ³
Temperature	20	°C	

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Method DIN EN ISO 2811-1

Vapour density

Remarks No data available

Particle characteristics

Remarks Not applicable

9.2. Other information**Efflux time**

Value > 61 s

Temperature 23 °C

Method DIN EN ISO 2431 - 6 mm

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

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

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

None

Thermal decomposition

Remarks No data available

10.5. Incompatible materials

None

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 > 100 mg/l

Administration/Form Vapors

Method calculated value (Regulation (EC) No. 1272/2008)

ATE > 20 mg/l

Administration/Form Dust/Mist

Method calculated value (Regulation (EC) No. 1272/2008)

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

Skin corrosion/irritation

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

Serious eye damage/irritation

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

Sensitization

evaluation May cause sensitization by skin contact.

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The classification criteria are met.

Mutagenicity

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

Reproductive toxicity

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

Carcinogenicity

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

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

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

Repeated exposure

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

Aspiration hazard

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

11.2. Information on other hazards**Endocrine disrupting properties with respect to humans**

The product does not contain a substance that has endocrine disrupting properties with respect to humans.

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

No toxicological data are available.

Daphnia toxicity

No toxicological data are available.

Algae toxicity

No toxicological data are available.

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.

12.3. Bioaccumulative potential

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

Octanol/water partition coefficient (log Pow)

Remarks No data available

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**Evaluation of persistence and bioaccumulation potential**

The product contains no PBT substances

The product contains no vPvB substances.

12.6 Endocrine disrupting properties**Endocrine disrupting properties with respect to the environment**

The product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms.

12.7. Other adverse effects

* BÜFA®-EcoShield 0701

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20607010240

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For this subsection there is no ecotoxicological data available on the product as such.
Ecological data are not available. Do not discharge into the drains/surface waters/groundwater.

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	Marine transport IMDG/GGVSee
14.1. UN number	The product does not constitute a hazardous substance in land transport.	The product does not constitute a hazardous substance in sea transport.

Information for all modes of transport

14.6. Special precautions for user

Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Other information

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

VOC

VOC (EU)
Remarks

1,07 %

This product may contain solvents that change chemically during processing. According to the Industrial Emissions Directive (Regulation 2010/75), such solvents are not to be classified as volatile organic compounds (VOC).

Other information

The product does not contain substances according to: Candidate List for inclusion in Annex XIV of Regulation (EC) No. 1907/2006 (REACH).

15.2. Chemical safety assessment

No information available

SECTION 16: Other information

Alterations/supplements: Alterations to the previous edition are marked with an asterisk (*) in the left-hand margin.

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Skin Sens. 1 H317 Calculation method

* BÜFA®-EcoShield 0701

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Hazard statements listed in Chapter 2/3

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.

CLP categories listed in Chapter 2/3

Acute Tox. 4	Acute toxicity, Category 4
Asp. Tox. 1	Aspiration hazard, Category 1
Eye Irrit. 2	Eye irritation, Category 2
Flam. Liq. 3	Flammable liquid, Category 3
Skin Irrit. 2	Skin irritation, Category 2
Skin Sens. 1	Skin sensitization, Category 1
STOT SE 3	Specific target organ toxicity - single exposure, Category 3

Abbreviations

ATE: Acute Toxicity Estimates
CAS: Chemical Abstracts Service
cATpE: Converted acute toxicity point estimate
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

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.