



SAFETY DATA SHEET

Vinylester Resin - part A

According to Regulation (EC) No 1907/2006, Annex II, as amended.

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

1.1. Product identifier

Product name JFV380SF, JFV300SF, JFEA410SFW part A

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

Identified uses Resin.

1.3. Details of the supplier of the safety data sheet

Supplier JCP Construction Products
Unit 14 Teddington Business Park
Station Rd.
Teddington
TW11 9BQ
Tel: +44 208 943 1800
Fax: +44 208 943 1140

Web www.jcpfixings.co.uk

Contact person jcpenquiries@owlett-jaton.com

1.4. Emergency telephone number

Emergency telephone +44 (0)208 943 1800 8.30am-5.00pm Monday to Friday

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Not Classified

Health hazards Eye Irrit. 2 - H319 Skin Sens. 1 - H317

Environmental hazards Aquatic Chronic 3 - H412

2.2. Label elements

Hazard pictograms



Signal word Warning

Hazard statements H319 Causes serious eye irritation.
H317 May cause an allergic skin reaction.
H412 Harmful to aquatic life with long lasting effects.

Vinylester Resin - part A

Precautionary statements	<p>P273 Avoid release to the environment.</p> <p>P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.</p> <p>P302+P352 IF ON SKIN: Wash with plenty of water.</p> <p>P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</p> <p>P362+P364 Take off contaminated clothing and wash it before reuse.</p> <p>P501 Dispose of contents/ container in accordance with national regulations.</p>
Contains	2-HYDROXYPROPYL METHACRYLATE
Labelling notes	<p>The product is not flammable.</p> <p>On basis of test data.</p> <p>UN Test N.1 and ASTM D4359-90</p>

2.3. Other hazards

SECTION 3: Composition/information on ingredients

3.2. Mixtures

2-HYDROXYPROPYL METHACRYLATE 5-10%		
CAS number: 27813-02-1	EC number: 248-666-3	REACH registration number: 01-2119490226-37
Classification		
Eye Irrit. 2 - H319		
Skin Sens. 1 - H317		
VINYL TOLUENE 5-10%		
CAS number: 25013-15-4	EC number: 246-562-2	REACH registration number: 01-2119622074-50
Classification		
Flam. Liq. 3 - H226		
Acute Tox. 4 - H332		
Skin Irrit. 2 - H315		
Eye Irrit. 2 - H319		
Asp. Tox. 1 - H304		
Aquatic Chronic 2 - H411		
TITANIUM DIOXIDE >0.5 <1.0%		
CAS number: 13463-67-7	EC number: 236-675-5	
Classification		
Not Classified		

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

Ingestion	Never give anything by mouth to an unconscious person. Do not induce vomiting. Rinse mouth thoroughly with water. Get medical attention if any discomfort continues.
Skin contact	Wash skin thoroughly with soap and water.

Vinylester Resin - part A

Eye contact Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention if irritation persists after washing. Show this Safety Data Sheet to the medical personnel.

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

Ingestion May cause discomfort if swallowed.

Skin contact Irritating to skin. May cause sensitisation or allergic reactions in sensitive individuals.

Eye contact Irritating to eyes.

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

Notes for the doctor No specific recommendations.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media Extinguish with foam, carbon dioxide or dry powder.

5.2. Special hazards arising from the substance or mixture

Specific hazards Not considered to be a significant hazard due to the small quantities used.

Hazardous combustion products Oxides of carbon.

5.3. Advice for firefighters

Protective actions during firefighting Avoid breathing fire gases or vapours.

Special protective equipment for firefighters Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Wear protective clothing as described in Section 8 of this safety data sheet.

6.2. Environmental precautions

Environmental precautions Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Collect and place in suitable waste disposal containers and seal securely. For waste disposal, see Section 13.

6.4. Reference to other sections

Reference to other sections Wear protective clothing as described in Section 8 of this safety data sheet. For waste disposal, see Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Store in tightly-closed, original container in a dry, cool and well-ventilated place. Keep away from oxidising materials, heat and flames.

Storage class Chemical storage.

7.3. Specific end use(s)

Vinylester Resin - part A

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure controls/Personal protection

8.1. Control parameters

Occupational exposure limits

TITANIUM DIOXIDE

Long-term exposure limit (8-hour TWA): WEL 4 mg/m³ respirable dust

Long-term exposure limit (8-hour TWA): WEL 10 mg/m³ inhalable dust

WEL = Workplace Exposure Limit.

2-HYDROXYPROPYL METHACRYLATE (CAS: 27813-02-1)

DNEL	Workers - Dermal; Long term systemic effects: 4.2 mg/kg Workers - Inhalation; Long term systemic effects: 14.7 mg/m ³
PNEC	Fresh water; 0.904 mg/l marine water; 0.904 mg/l STP; 20 mg/l Sediment (Freshwater); 6.28 mg/kg Sediment (Marinewater); 6.28 mg/kg Soil; 0.727 mg/kg

VINYL TOLUENE (CAS: 25013-15-4)

DNEL	Industry - Inhalation; Long term systemic effects: 37 mg/m ³ Industry - Inhalation; Long term local effects: 37 mg/m ³ REACH dossier information
PNEC	- Fresh water; 0.0498 mg/l - marine water; 0.002 mg/l - Intermittent release; 0.013 mg/l - STP; 1 mg/l - Sediment (Freshwater); 0.684 mg/kg - Sediment (Marinewater); 0.0684 mg/kg - Soil; 0.133 mg/kg REACH dossier information

TITANIUM DIOXIDE (CAS: 13463-67-7)

DNEL	Industry - Inhalation; Long term systemic effects: 10 mg/m ³ REACH dossier information
PNEC	- Fresh water; 0.127 mg/l - marine water; 1.0 mg/l - Intermittent release; 0.61 mg/l - STP; 100 mg/l - Sediment (Freshwater); 1000 mg/kg - Sediment (Marinewater); 100 mg/kg - Soil; 100 mg/kg REACH dossier information

8.2. Exposure controls

Vinylester Resin - part A

Protective equipment



Appropriate engineering controls

Provide adequate ventilation. Observe any occupational exposure limits for the product or ingredients.

Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible.

Hand protection

It is recommended that chemical-resistant, impervious gloves are worn.

Other skin and body protection

Wear appropriate clothing to prevent any possibility of skin contact.

Hygiene measures

Do not smoke in work area. Wash at the end of each work shift and before eating, smoking and using the toilet. Wash promptly if skin becomes contaminated. Promptly remove any clothing that becomes contaminated. Use appropriate skin cream to prevent drying of skin. When using do not eat, drink or smoke.

Respiratory protection

No specific recommendations. Respiratory protection may be required if excessive airborne contamination occurs.

Environmental exposure controls

Keep container tightly sealed when not in use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Solid.
Colour	Beige.
Odour	Aromatic.
Odour threshold	Not determined.
pH	Not applicable.
Melting point	Not determined.
Initial boiling point and range	Not determined.
Flash point	Not determined.
Evaporation rate	Not determined.
Evaporation factor	Not determined.
Flammability (solid, gas)	Not determined.
Upper/lower flammability or explosive limits	Not determined.
Other flammability	Not determined.
Vapour pressure	Not determined.
Vapour density	Not determined.
Relative density	1.65 - 1.75 @ 20°C
Bulk density	Not applicable.

Vinylester Resin - part A

Solubility(ies)	Insoluble in water.
Partition coefficient	Not determined.
Auto-ignition temperature	Not determined.
Decomposition Temperature	Not determined.
Viscosity	Not applicable.
Explosive properties	Not considered to be explosive.
Explosive under the influence of a flame	Not considered to be explosive.
Oxidising properties	Not determined.

9.2. Other information

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity The following materials may react with the product: Organic peroxides/hydroperoxides.

10.2. Chemical stability

Stability Stable at normal ambient temperatures.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions Does not decompose when used and stored as recommended.

10.4. Conditions to avoid

Conditions to avoid Avoid excessive heat for prolonged periods of time.

10.5. Incompatible materials

Materials to avoid Organic peroxides/hydroperoxides.

10.6. Hazardous decomposition products

Hazardous decomposition products Oxides of carbon.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - inhalation

ATE inhalation (vapours mg/l) 159.52

Skin corrosion/irritation

Skin corrosion/irritation Irritating to skin.

Serious eye damage/irritation

Serious eye damage/irritation Causes eye irritation.

Ingestion May cause discomfort if swallowed.

Skin contact Irritating to skin. May cause sensitisation or allergic reactions in sensitive individuals.

Eye contact Irritating to eyes.

Route of exposure Skin and/or eye contact

Vinylester Resin - part A

Medical symptoms Irritation of eyes and mucous membranes. Skin irritation.

Toxicological information on ingredients.

2-HYDROXYPROPYL METHACRYLATE

Acute toxicity - oral

Acute toxicity oral (LD₅₀
mg/kg) 11,200.0

Species Rat

ATE oral (mg/kg) 11,200.0

VINYL TOLUENE

Acute toxicity - oral

Acute toxicity oral (LD₅₀
mg/kg) 2,255.0

Species Rat

ATE oral (mg/kg) 2,255.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀
mg/kg) 4,500.0

Species Rat

ATE dermal (mg/kg) 4,500.0

Acute toxicity - inhalation

ATE inhalation (vapours
mg/l) 11.0

Carcinogenicity

IARC carcinogenicity IARC Group 3 Not classifiable as to its carcinogenicity to humans.

TITANIUM DIOXIDE

Acute toxicity - oral

Acute toxicity oral (LD₅₀
mg/kg) 5,000.0

Species Rat

Carcinogenicity

IARC carcinogenicity IARC Group 2B Possibly carcinogenic to humans.

SECTION 12: Ecological information

12.1. Toxicity

Ecological information on ingredients.

VINYL TOLUENE

Acute aquatic toxicity

Acute toxicity - fish LC50, 96 hours: 23.4 mg/l, Pimephales promelas (Fat-head Minnow)

Vinylester Resin - part A

Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: 1.3 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC ₅₀ , 72 hours: 2.6 mg/l, Selenastrum capricornutum

TITANIUM DIOXIDE

Acute aquatic toxicity

Acute toxicity - fish	LC ₀ , >: 1000 mg/l, Leuciscus idus (Golden orfe) REACH dossier information
Acute toxicity - aquatic invertebrates	NOEC, > 48 hours: 3 mg/l, Daphnia magna REACH dossier information
Acute toxicity - microorganisms	EC ₅₀ , > 3 hours: 1000 mg/l, Activated sludge REACH dossier information

12.2. Persistence and degradability

12.3. Bioaccumulative potential

Bioaccumulative potential	No data available on bioaccumulation.
Partition coefficient	Not determined.

Ecological information on ingredients.

2-HYDROXYPROPYL METHACRYLATE

Partition coefficient	log Kow: 0.93
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VINYL TOLUENE

Partition coefficient	log Pow: 3.36
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12.4. Mobility in soil

Mobility	Not applicable.
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12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment	This product does not contain any substances classified as PBT or vPvB.
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12.6. Other adverse effects

Other adverse effects	Not applicable.
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SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information	Dispose of waste product or used containers in accordance with local regulations
Disposal methods	Dispose of waste via a licensed waste disposal contractor.
Waste class	The waste code classification is to be carried out according to the European Waste Catalogue (EWC).

SECTION 14: Transport information

General	The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).
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Vinylester Resin - part A

14.1. UN number

Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

No transport warning sign required.

14.4. Packing group

Not applicable.

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

14.6. Special precautions for user

Not applicable.

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Transport in bulk according to Not applicable.

Annex II of MARPOL 73/78
and the IBC Code

SECTION 15: Regulatory information

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

EU legislation (EU) No 2015/830

Guidance Workplace Exposure Limits EH40.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

General information	The product is not flammable. On basis of test data. UN Test N.1 and ASTM D4359-90
Revision comments	NOTE: Lines within the margin indicate significant changes from the previous revision.
Revision date	26/10/2020
Version number	3.001
Supersedes date	13/01/2020
SDS number	20343
Hazard statements in full	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. H411 Toxic to aquatic life with long lasting effects. H412 Harmful to aquatic life with long lasting effects.

Vinylester Resin - part A

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.



SAFETY DATA SHEET

Vinylester Resin - part B

According to Regulation (EC) No 1907/2006, Annex II, as amended.

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

1.1. Product identifier

Product name JFV380SF, JFV300SF, JFEA410SFW part B

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

Identified uses Catalyst.

1.3. Details of the supplier of the safety data sheet

Supplier JCP Construction Products
Unit 14 Teddington Business Park
Station Rd.
Teddington
TW11 9BQ
Tel: +44 208 943 1800
Fax: +44 208 943 1140

Web www.jcpfixings.co.uk

Contact person jcpenquiries@owlett-jaton.com

1.4. Emergency telephone number

Emergency telephone +44 (0)208 943 1800 8.30am-5.00pm Monday to Friday

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Not Classified

Health hazards Eye Irrit. 2 - H319 Skin Sens. 1 - H317

Environmental hazards Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410

Human health May cause skin disorders if contact is repeated or prolonged. The product is irritating to eyes and skin.

Environmental The product contains a substance which is very toxic to aquatic organisms and which may cause long-term adverse effects in the aquatic environment.

Physicochemical Not considered to be a significant hazard due to the small quantities used.

2.2. Label elements

Hazard pictograms



Signal word Warning

Vinylester Resin - part B

Hazard statements	H319 Causes serious eye irritation. H317 May cause an allergic skin reaction. H410 Very toxic to aquatic life with long lasting effects.
Precautionary statements	P273 Avoid release to the environment. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P302+P352 IF ON SKIN: Wash with plenty of water. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P333+P313 If skin irritation or rash occurs: Get medical advice/ attention. P501 Dispose of contents/ container in accordance with national regulations.
Contains	BENZOYL PEROXIDE
Supplementary precautionary statements	P264 Wash contaminated skin thoroughly after handling. P337+P313 If eye irritation persists: Get medical advice/ attention. P362+P364 Take off contaminated clothing and wash it before reuse.
Labelling notes	On basis of test data. Solid - ASTM D4359-90

2.3. Other hazards

SECTION 3: Composition/information on ingredients

3.2. Mixtures

BENZOYL PEROXIDE		10-15%
CAS number: 94-36-0	EC number: 202-327-6	REACH registration number: 01-2119511472-50
M factor (Acute) = 10	M factor (Chronic) = 10	
Classification Org. Perox. B - H241 Eye Irrit. 2 - H319 Skin Sens. 1 - H317 Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410		

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation	Move affected person to fresh air at once. Get medical attention if any discomfort continues.
Ingestion	Never give anything by mouth to an unconscious person. Do not induce vomiting. Rinse mouth thoroughly with water. Get medical attention if any discomfort continues.
Skin contact	Remove affected person from source of contamination. Remove contaminated clothing. Wash skin thoroughly with soap and water. Get medical attention if any discomfort continues.
Eye contact	Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention if irritation persists after washing. Show this Safety Data Sheet to the medical personnel.

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

Ingestion	May cause discomfort if swallowed.
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Vinylester Resin - part B

Skin contact Causes skin irritation.

Eye contact Irritation of eyes and mucous membranes.

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

Notes for the doctor No specific recommendations. If in doubt, get medical attention promptly.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media Extinguish with foam, carbon dioxide or dry powder.

5.2. Special hazards arising from the substance or mixture

Specific hazards No specific firefighting precautions applicable when small quantities are involved in the fire.

Hazardous combustion products Oxides of carbon.

5.3. Advice for firefighters

Protective actions during firefighting Avoid breathing fire gases or vapours.

Special protective equipment for firefighters Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Wear protective clothing as described in Section 8 of this safety data sheet.

6.2. Environmental precautions

Environmental precautions Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Collect and place in suitable waste disposal containers and seal securely. For waste disposal, see Section 13.

6.4. Reference to other sections

Reference to other sections Wear protective clothing as described in Section 8 of this safety data sheet. For waste disposal, see Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Keep away from heat, sparks and open flame.

Advice on general occupational hygiene Do not eat, drink or smoke when using this product. No specific hygiene procedures recommended but good personal hygiene practices should always be observed when working with chemical products.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Keep away from flammable and combustible materials. Store at temperatures between 5°C/41°F and 25°C/77°F.

Storage class Chemical storage.

7.3. Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

Vinylester Resin - part B

SECTION 8: Exposure controls/Personal protection

8.1. Control parameters

Occupational exposure limits

BENZOYL PEROXIDE

Long-term exposure limit (8-hour TWA): WEL 5 mg/m³

WEL = Workplace Exposure Limit.

BENZOYL PEROXIDE (CAS: 94-36-0)

DNEL	Industry - Dermal; Long term : 6.6 mg/kg/day Industry - Oral; Long term : 1.6 mg/kg/day Industry - Inhalation; Long term : 11.75 mg/m ³
PNEC	- Sediment (Marinewater); 0.0338 mg/kg - Fresh water; 0.000602 mg/l - STP; 0.35 mg/l - marine water; 0.0000602 mg/l - Sediment (Freshwater); 0.338 mg/kg

8.2. Exposure controls

Protective equipment



Appropriate engineering controls

Provide adequate ventilation.

Eye/face protection

The following protection should be worn: Chemical splash goggles.

Hand protection

Wear protective gloves made of the following material: Nitrile rubber.

Other skin and body protection

Wear appropriate clothing to prevent any possibility of skin contact.

Hygiene measures

Wash at the end of each work shift and before eating, smoking and using the toilet. Do not smoke in work area.

Respiratory protection

No specific recommendations.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Solid.
Colour	Black.
Odour	Characteristic.
Odour threshold	Not determined.
pH	6
Melting point	Not applicable.
Initial boiling point and range	Not applicable.
Flash point	Not applicable.
Evaporation rate	Not determined.

Vinylester Resin - part B

Evaporation factor	Not determined.
Flammability (solid, gas)	Not determined.
Upper/lower flammability or explosive limits	Not determined.
Other flammability	Not determined.
Vapour pressure	Not determined.
Vapour density	Not determined.
Relative density	1.5 - 1.6
Bulk density	Not applicable.
Solubility(ies)	Not determined.
Partition coefficient	Not determined.
Auto-ignition temperature	Not determined.
Decomposition Temperature	+50°C
Viscosity	> 60 S ISO2431
Explosive properties	No information available.
Oxidising properties	Not determined.

9.2. Other information

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity The following materials may react with the product: Acids. Alkalis. Amines. Strong reducing agents.

10.2. Chemical stability

Stability Stable at normal ambient temperatures and when used as recommended. Will decompose at temperatures exceeding 50°C.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions Will not polymerise.

10.4. Conditions to avoid

Conditions to avoid Avoid contact with strong reducing agents. Avoid heat. Avoid contact with acids and alkalis.

10.5. Incompatible materials

Materials to avoid Strong reducing agents. Acids, non-oxidising. Acids - organic. Alkalis - inorganic. Alkalis - organic. Amines.

10.6. Hazardous decomposition products

Hazardous decomposition products Oxides of carbon.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Skin sensitisation

Vinylester Resin - part B

Skin sensitisation	Sensitising.
Inhalation	No specific health hazards known.
Ingestion	May cause discomfort if swallowed.
Skin contact	Irritating to skin. May cause sensitisation by skin contact.
Eye contact	Irritation of eyes and mucous membranes.
Route of exposure	Skin and/or eye contact
Medical symptoms	Skin irritation. Irritation of eyes and mucous membranes.
Medical considerations	No information available.

Toxicological information on ingredients.

BENZOYL PEROXIDE

Carcinogenicity

IARC carcinogenicity IARC Group 3 Not classifiable as to its carcinogenicity to humans.

SECTION 12: Ecological information

12.1. Toxicity

Ecological information on ingredients.

BENZOYL PEROXIDE

Acute aquatic toxicity

LE(C)₅₀ 0.01 < L(E)C₅₀ ≤ 0.1

M factor (Acute) 10

Acute toxicity - fish LC₅₀, 96 hours: 0.06 mg/l, Oncorhynchus mykiss (Rainbow trout)

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 0.11 mg/l, Daphnia magna

Acute toxicity - aquatic plants EC₅₀, 72 hours: 0.07 mg/l, Selenastrum capricornutum

Chronic aquatic toxicity

M factor (Chronic) 10

12.2. Persistence and degradability

Persistence and degradability There are no data on the degradability of this product.

12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient Not determined.

12.4. Mobility in soil

Mobility Mobile. The product is partly miscible with water and may spread in the aquatic environment.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

Vinylester Resin - part B

12.6. Other adverse effects

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information	Dispose of waste product or used containers in accordance with local regulations
Disposal methods	Dispose of waste via a licensed waste disposal contractor.
Waste class	The waste code classification is to be carried out according to the European Waste Catalogue (EWC).

SECTION 14: Transport information

14.1. UN number

UN No. (ADR/RID)	3077
UN No. (IMDG)	3077
UN No. (ICAO)	3077
UN No. (ADN)	3077

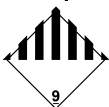
14.2. UN proper shipping name

Proper shipping name (ADR/RID)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (CONTAINS BENZOYL PEROXIDE, BENZOIC ACID, NONYL ESTER, BRANCHED AND LINEAR)
Proper shipping name (IMDG)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (CONTAINS BENZOYL PEROXIDE, BENZOIC ACID, NONYL ESTER, BRANCHED AND LINEAR)
Proper shipping name (ICAO)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (CONTAINS BENZOYL PEROXIDE, BENZOIC ACID, NONYL ESTER, BRANCHED AND LINEAR)
Proper shipping name (ADN)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (CONTAINS BENZOYL PEROXIDE, BENZOIC ACID, NONYL ESTER, BRANCHED AND LINEAR)

14.3. Transport hazard class(es)

ADR/RID class	9
ADR/RID classification code	M7
ADR/RID label	9
IMDG class	9
ICAO class/division	9
ADN class	9

Transport labels



14.4. Packing group

ADR/RID packing group	III
IMDG packing group	III
ICAO packing group	III
ADN packing group	III

Vinylester Resin - part B

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant



14.6. Special precautions for user

EmS	F-A, S-F
ADR transport category	3
Emergency Action Code	2Z
Hazard Identification Number (ADR/RID)	90
Tunnel restriction code	(-)

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

SECTION 15: Regulatory information

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

EU legislation (EU) No 2015/830

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

General information	On basis of test data. Solid - ASTM D4359-90
Revision comments	NOTE: Lines within the margin indicate significant changes from the previous revision.
Revision date	28/04/2021
Version number	3.002
Supersedes date	26/10/2020
SDS number	20483
Hazard statements in full	H241 Heating may cause a fire or explosion. H317 May cause an allergic skin reaction. H319 Causes serious eye irritation. H400 Very toxic to aquatic life. H410 Very toxic to aquatic life with long lasting effects.

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.