TRICURE RESIN 12B621E

Product Name:	**TriCure Resin 12B621E** **1069156 Rev.1**
Revision Date:	03-Sep-2024 **According to Regulation (EC) No. 1907/2006**

1. Identification of the substance/mixture and of the company/undertaking

1.1. Product Identifier

Product Name: TriCure Resin 12B621E

Product Description: Modified styrenic solution of the condensation product of polycarboxylic acids / acid anhydrides with a mixture of polyhydric alcohols.

Pure Substance/Mixture: Mixture

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

Main use category: Industrial use, Professional use

Industrial/Professional use spec: Production of mixtures, resin compositions, mineral-resin compositions, articles reinforced with fibre glass

1.3. Details of the supplier of the safety data sheet

Tricel Composites (GB) Limited

Unit A, Foxway,
Off Atkinson Street,
Leeds, West Yorkshire,
LS10 1PS.
Tel: +44 (0)113 270 3133

Tricel Composites (NI) Limited

Unit 4, Milltown Ind. Estate, Greenan Road. Warrenpoint, Newry
Co. Down,
BT34 3FN.
Tel: +44 (0)284 175 3738

1.4. Emergency Telephone Number

Emergency medical information: 8am-10pm (seven days) contact National Poisons Information Centre, Beaumont Hospital, Dublin 9 DOV2NO, Ireland.
Telephone Number: +353 (0)1 809 2166

Leeds:	**Newry:**
Tel: +44 (0)113 270 3133	Tel: +44 (0)284 175 3738

1.4.1. Poison Information Centre Telephone Number

European emergency phone number: 112
UK: National Poisons Emergency Number : 0344 892 0111
Ireland: National Poisons Information Centre (NPIC)Telephone Healthcare Professionals : +353 (01) 809 2566. (24 hour service)Telephone Members of Public: +353 (01) 809 2166. (8.00 a.m. to 10.00 p.m. 7 days a week)

2. Hazards Identification

2.1. Classification of the substance or mixture

Classification of the substance or mixture - GHS/CLP (n° 1272/2008)

Flam. Liq. 3	H226
Skin Irrit. 2	H315
Eye Irrit. 2	H319
Skin Sens. 1	H317
Repr. 2	H361d
STOT SE 3	H335
STOT RE 1	H372
Aquatic Chronic 3	H412

Full text of hazard classes, H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects:

Flammable liquid and vapour. Suspected of damaging the unborn child. Causes damage to organs (hearing organs) through prolonged or repeated exposure (inhalation). May cause respiratory irritation. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation.
Harmful to aquatic life with long lasting effects.

2.2. Label elements

GHS02 GHS07 GHS08

Signal Word: Danger

Contains: α-methylstyrene; maleic anhydride; styrene

2.2.1. Hazard Statements (CLP)

H226 - Flammable liquid and vapour.

H315 - Causes skin irritation.

H317 - May cause an allergic skin reaction.

H319 - Causes serious eye irritation.

H335 - May cause respiratory irritation.

H361d - Suspected of damaging the unborn child.

H372 - Causes damage to organs (hearing organs) through prolonged or repeated exposure (inhalation).

H412 - Harmful to aquatic life with long lasting effects.

2.2.2. Precautionary Statements (CLP)

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P261 - Avoid breathing spray, vapours.

P280 - Wear protective gloves, protective clothing, eye protection, face protection.

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

P273 - Avoid release to the environment.

2.3. Other Hazards

Other hazards which do not result in classification:

Vapour could form explosive mixture with air. The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %.

The product does not meet the PBT and vPvB classification criteria

3. Composition/Information on Ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
styrene	(CAS-No.) 100-42-5 (EC-No.) 202-851-5 (EC Index-No.) 601-026-00-0 (REACH-no) 01-2119457861-32- XXXX	30 – 50	Flam. Liq. 3, H226 Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Repr. 2, H361d STOT SE 3, H335 STOT RE 1, H372 Asp. Tox. 1, H304 Aquatic Chronic 3, H412
α-methylstyrene substance with a Community workplace exposure limit	(CAS-No.) 98-83-9 (EC-No.) 202-705-0 (EC Index-No.) 601-027-00-6 (REACH-no) 01-2119472426-35- XXXX	0 – 2	Flam. Liq. 3, H226 Eye Irrit. 2, H319 Skin Sens. 1, H317 Repr. 2, H361 STOT SE 3, H335 Asp. Tox. 1, H304

			Aquatic Chronic 2, H411
maleic anhydride	(CAS-No.) 108-31-6 (EC-No.) 203-571-6 (EC Index-No.) 607-096-00-9 (REACH-no) 01-2119472428-31- XXXX	≤ 0,02	Acute Tox. 4 (Oral), H302 Skin Corr. 1B, H314 Eye Dam. 1, H318 Resp. Sens. 1, H334 Skin Sens. 1A, H317 STOT RE 1, H372

Specific concentration limits:		
Name	Product identifier	Specific concentration limits
α-methylstyrene	(CAS-No.) 98-83-9 (EC-No.) 202-705-0 (EC Index-No.) 601-027-00-6 (REACH-no) 01-2119472426-35- XXXX	(25 ≤ C ≤ 100) STOT SE 3; H335
maleic anhydride	(CAS-No.) 108-31-6 (EC-No.) 203-571-6 (EC Index-No.) 607-096-00-9 (REACH-no) 01-2119472428-31- XXXX	(0,001 ≤ C ≤ 100) Skin Sens. 1A; H317

4. First Aid Measures

4.1. Description of First Aid Measures

First-aid measures general: IF exposed or concerned: Get medical advice/attention.

First-aid measures after inhalation: Remove person to fresh air and keep comfortable for breathing. Call a poison center or a doctor if you feel unwell.

First-aid measures after skin contact: Rinse skin with water/shower. Take off immediately all contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.

First-aid measures after eye contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion: Call a poison center or a doctor if you feel unwell.

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

Symptoms/effects after inhalation: May cause respiratory irritation.

Symptoms/effects after skin contact: Irritation. May cause an allergic skin reaction.

Symptoms/effects after eye contact: Eye irritation.

4.3. Indication of any immediate medical attention and special treatment

The decision on how to proceed with the rescue should be made by the doctor after careful assessment of the victim's condition. In case of severe poisoning, measures to prevent liver damage should be given; control the function of the heart and circulatory system. There is no antidote. Treat symptomatically.

5. Firefighting Measures

5.1. Extinguishing media

Suitable extinguishing media: **Water spray. Dry powder. Foam. Carbon dioxide.**

Unsuitable extinguishing media: **Do not use a heavy water stream.**

5.2. Special Hazards arising from substance or mixture

Fire hazard: Flammable liquid and vapour.

Hazardous decomposition products in case of fire: During combustion, hazardous vapors and gases containing thermal decomposition products, carbon oxides and soot may be formed. Avoid inhalation of combustion products, they may be hazardous to health.

5.3. Advice for Firefighters

Protection during firefighting: General protection measures typical in case of fire. Do not stay in the fire zone without appropriate clothing. Recommended personal protective equipment for emergency services: full protective suit, self-contained breathing apparatus. Proceed with firefighting waters as in subsection 6.2. and 6.3.

6. Accidental Release Measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Protective equipment: **See Section 8. For further information refer to section 8: "Exposure controls/personal protection". Wear recommended personal protective equipment.**

Emergency procedures:	**Ventilate spillage area. No open flames, no sparks, and no smoking. Do not breathe vapours, spray. Avoid contact with skin and eyes.**
For emergency responders	
Protective equipment:	For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental Precautions

Avoid release to the environment. Avoid the formation of vapors. In case of spillage, steps should be taken to prevent it from spreading into the environment - prevent it from reaching sewage systems, water reservoirs, rivers, groundwater and soil. Do not use open fire, avoid sparks, eliminate ignition sources. Notify the appropriate emergency services. Warn others about the danger. Similar precautions should also be taken in the event of fire water.

6.3. Methods and Material for Containment and Cleaning Up

For containment:	Mark out the contaminated area with signs and prevent access to unauthorized personnel.
Methods for cleaning up:	Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.
Other information:	Proceed in accordance with the Environmental Protection Law and the Waste Act. Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

7. Handling and Storage

7.1. Precautions for safe handling

Precautions for safe handling: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use only non-sparking tools. Take precautionary measures against static discharge. Use explosion-proof equipment. Wear personal protective equipment. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe vapours, spray. Use only outdoors or in a well-ventilated area. Avoid contact with skin and eyes.

Hygiene measures: Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store locked up.

Storage temperature: ≤ 25 °C

7.3. Specific end use(s)

See Section 1.

8. Exposure Controls/Personal Protection

8.1. Exposure Controls

8.1.1. Appropriate Engineering Controls

Appropriate engineering controls:

Ensure adequate ventilation in confined areas. If ventilation is not sufficient, to keep vapour concentrations below the limit values use the appropriate respiratory protection. Personal protection equipment should be selected on the basis of substance concentrations at individual work stations, exposure time, operator functions and recommendations indicated by the supplier of the equipment. In explosion-risk areas, wear clothes, gloves and boots with electrostatic discharge protection function. Procedures for monitoring concentrations of hazardous components in the air and procedures for air cleanliness in the workplace should be applied - as long as they are available and justified at the workplace - in accordance with the relevant reference methods - standards in force in Poland. The mode, type and frequency of tests and measurements should meet the requirements of the Regulation of the Minister of Health of February 2, 2011 on tests and measurements of factors harmful to health in the work environment (Journal of Laws No. 33 item 166, as amended).

8.1.2. **Personal protection equipment**

Personal protective equipment symbol(s):

8.1.3. Eye and face protection

Eye protection:			
Safety glasses			
Type	Field of application	Characteristics	Standard
Safety goggles, Face shield	Droplet	clear	EN ISO 16321-1

8.1.4. Skin protection

Skin and body protection:
Wear suitable protective clothing

Hand protection:					
Protective gloves					
Type	Material	Permeation	Thickness (mm)	Penetration	Standard
Protective gloves	Butyl rubber, Polyvinylchloride (PVC), Polyvinylalcohol (PVA)	6 (> 480 minutes)	> 0,4 mm	3 (> 0.65)	EN ISO 374-1, EN ISO 21420

Other skin protection Materials for protective clothing:		
Use protective clothing. Safety foot-wear		
Condition	Material	Standard
Indoor or outdoor use	Antistatic clothing, antistatic boots	EN ISO 13688, EN 14605, EN ISO 20346

8.1.5. Respiratory protection

Respiratory protection:
In case of insufficient ventilation, wear suitable respiratory equipment

Device	Filter type	Condition	Standard
Full face mask	ABEK	Vapour protection, Protection for Liquid particles, If conc. in air > exposure limit	EN 143, EN 149, EN 136
Reusable half mask	Type P2	Vapour protection, Short term exposure	EN 143, EN 149

8.1.6. Thermal hazards

No additional information available

8.1.7. Environmental exposure controls

Environmental exposure controls:

In order to reduce the impact on the environment and human health, the recommendations contained in this safety data sheet should be followed. When carrying out operations with the product at elevated temperatures, use efficient ventilation systems equipped with devices preventing the emission of gases into the atmospheric air. Do not contaminate water with the product or its packaging. Prevent the product or its packaging from getting into the sewage system, water reservoirs, rivers, groundwater and soil. It is forbidden to recover or dispose of the product, packaging and packaging waste outside of the installations or devices intended for this purpose, meeting the requirements specified in the provisions of the Act on waste. Avoid release to the environment.

8.1.8. Other Information

in accordance with good industrial hygiene and safety procedures.

9. Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Various colours.
Odour	: characteristic. Sweet. Aromatic.
Odour threshold	: 0,1 ppm (for styrene)
Melting point	: Not applicable
Freezing point	: -31 °C (for styrene)
Boiling point	: 143 °C
Flammability	: Flammable liquid and vapour.
Explosive properties	: Non-explosive.
Oxidising properties	: Does not apply.
Explosive limits	: Not available
Lower explosion limit	: Not available
Upper explosion limit	: Not available
Flash point	: 33 °C
Auto-ignition temperature	: 480 °C
Decomposition temperature	: Not available
pH	: Not available
Viscosity, kinematic	: > 90 mm^2/s (40^0C)
Viscosity, dynamic	: 190 – 1100 mPa·s (25^0C)
Solubility	: Soluble in acetone. Soluble in ethanol.
Partition coefficient n-octanol/water (Log Kow)	: Not available
Partition coefficient n-octanol/water (Log Pow)	: 2,95 (for styrene)

Vapour pressure	: 8 kPa (50^0C)
Vapour pressure at 50°C	: Not available
Density	: 1120 kg/m³ (25^0C)
Relative density	: Not available
Relative vapour density at 20°C	: Not available
Particle size	: Not applicable
Particle size distribution	: Not applicable
Particle shape	: Not applicable
Particle aspect ratio	: Not applicable
Particle aggregation state	: Not applicable
Particle agglomeration state	: Not applicable
Particle specific surface area	: Not applicable
Particle dustiness	: Not applicable

9.2. Other Information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

Attempt to separate the solvent (height of the separated layer):

<3% For mixtures: : Polimal 122-1, Polimal 122-2, Polimal 1222, Polimal 122-2 U, Polimal 122-2 LP, Polimal 122-20, Polimal 122-20 P, Polimal 122-21, Polimal 122-21 AWTP, Polimal 122-22, Polimal 122-24, Polimal 122-25 TP, Polimal 122-26 X, Polimal 122-2 T, Polimal 122-2 P, Polimal 122-2 TP, Polimal 122-2 TP-2, Polimal 122-2 A, Polimal 122-2 AP, Polimal 122-2 AT, Polimal 122-2 ATP, Polimal 122-2 WTP, Polimal 122-2 WTP-2, Polimal 122-2 WTPS, Polimal 122-2 AWTP, Polimal 122-2 AWTP-2, Polimal 122-2 KWTP, Polimal 122-28.

Flow time from flow cup (ISO 2431:1993):

> 40 s (ø=6mm) For mixtures: : Polimal 122-1, Polimal 122-2, Polimal 1222, Polimal 122-2 U, Polimal 122-2 LP, Polimal 122-20, Polimal 122-20 P, Polimal 122-21, Polimal 122-21 AWTP, Polimal 122-22, Polimal 122-24, Polimal 122-25 TP, Polimal 122-26 X, Polimal 122- 2 T, Polimal 122-2 P, Polimal 122-2 TP, Polimal 122-2 TP-2, Polimal 122-2 A, Polimal 122-2 AP, Polimal 122-2 AT, Polimal 122-2 ATP, Polimal 122-2 WTP, Polimal 122-2 WTP-2, Polimal 122-2 WTPS, Polimal 122-2 AWTP, Polimal 122-2 AWTP-2, Polimal 122-2 KWTP, Polimal 122-28

10. Stability and Reactivity

10.1. Reactivity

It undergoes radical polymerization initiated with organic peroxides or under the influence of thermal and photochemical factors and sunlight. Polymerization can be violent.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

10.5. Incompatible materials

Strong acids, strong bases and strong oxidants. copper. Brass. Aluminium chloride.

10.6. Hazardous decomposition Products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11. Toxicological Information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008Acute toxicity

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

α-methylstyrene (98-83-9)	
LD50 oral rat	≈ 4900 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: other:
LD50 dermal rabbit	≈ 14560 mg/kg bodyweight Animal: rabbit, Animal sex: male, Guideline: other:

maleic anhydride (108-31-6)	
LD50 dermal rabbit	2620 mg/kg bodyweight Animal: rabbit, Animal sex: female, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)

styrene (100-42-5)	
LD50 oral	> 6000 mg/kg bodyweight Animal: hamster, Syrian, Animal sex: male
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
LC50 Inhalation - Rat (Vapours)	11,8 mg/l/4h

Skin corrosion/irritation : Causes skin irritation.
Serious eye damage/irritation : Causes serious eye irritation.

Respiratory or skin sensitisation	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Suspected of damaging the unborn child.
STOT-single exposure	: May cause respiratory irritation.

α-methylstyrene (98-83-9)	
STOT-single exposure	May cause respiratory irritation.

styrene (100-42-5)	
STOT-single exposure	May cause respiratory irritation.

STOT-repeated exposure : Causes damage to organs (hearing organs) through prolonged or repeated exposure (inhalation).

α-methylstyrene (98-83-9)	
LOAEL (oral, rat, 90 days)	200 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
NOAEC (inhalation, rat, gas, 90 days)	300 ppm Animal: rat, Guideline: OECD Guideline 413 (Subchronic Inhalation Toxicity: 90- Day Study)

maleic anhydride (108-31-6)	
NOAEL (oral, rat, 90 days)	≈ 10 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 452 (Chronic Toxicity Studies)
NOAEC (inhalation, rat, vapour, 90 days)	≈ 0,0033 mg/l air Animal: rat, Guideline: OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day Study)
STOT-repeated exposure	Causes damage to organs through prolonged or repeated exposure.

styrene (100-42-5)	
LOAEL (oral, rat, 90 days)	2000 mg/kg bodyweight Animal: rat
LOAEC (inhalation, rat, vapour, 90 days)	0,21 mg/l air Animal: rat, Guideline: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies)
NOAEL (oral, rat, 90 days)	1000 mg/kg bodyweight Animal: rat
NOAEL (subchronic, oral, animal/male, 90 days)	10 mg/kg bodyweight Animal: mouse, Animal sex: male
STOT-repeated exposure	Causes damage to organs (hearing organs) through prolonged or repeated exposure.

Aspiration hazard : Not classified

POLIMAL® 122-1 POLIMAL® 122-2 and series	
Viscosity, kinematic	> 90 mm²/s (40°C)

11.2. Information on Other Hazards

11.2.1. Endocrine disrupting properties

Adverse health effects caused by endocrine disrupting properties

11.2.2. Other information

12. Ecological Information

12.1. Toxicity

Ecology - general: Harmful to aquatic life with long lasting effects.

Hazardous to the aquatic environment, short-term (acute) : Not classified

Hazardous to the aquatic environment, long-term (chronic) : Harmful to aquatic life with long lasting effects.

Not rapidly degradable

α-methylstyrene (98-83-9)	
LC50 - Fish [1]	2,97 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)
EC50 - Crustacea [1]	1645 mg/l Test organisms (species): Daphnia magna
NOEC (chronic)	0,401 mg/l Test organisms (species): Daphnia magna Duration: '21 d'

maleic anhydride (108-31-6)	
LC50 - Fish [1]	75 mg/l Test organisms (species): Lepomis macrochirus
LC50 - Fish [2]	75 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)
EC50 - Crustacea [1]	330 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	> 150 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)

styrene (100-42-5)	
LC50 - Fish [1]	10 mg/l Test organisms (species): Pimephales promelas
EC50 - Crustacea [1]	4,7 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	4,9 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
EC50 96h - Algae [1]	6,3 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
LOEC (chronic)	2,06 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC (chronic)	1,01 mg/l Test organisms (species): Daphnia magna Duration: '21 d'

12.2. Persistence and degradability

α-methylstyrene (98-83-9)	
Persistence and degradability	Not readily biodegradable.

maleic anhydride (108-31-6)	
Persistence and degradability	Readily biodegradable.

styrene (100-42-5)	
Persistence and degradability	Readily biodegradable.
Biochemical oxygen demand (BOD)	1,96 g O_2/g substance
Chemical oxygen demand (COD)	2,8 g O_2/g substance
Biodegradation	70,9 %

12.3. Bioaccumulative potential

POLIMAL® 122-1 POLIMAL® 122-2 and series	
Partition coefficient n-octanol/water (Log Pow)	2,95 (for styrene)

α-methylstyrene (98-83-9)	
Bioaccumulative potential	Bioaccumulation unlikely.

maleic anhydride (108-31-6)	
Bioaccumulative potential	No bioaccumulation data available.

styrene (100-42-5)	
Partition coefficient n-octanol/water (Log Pow)	2,95
Bioaccumulative potential	Potential to bioaccumulate is low.

12.4. Mobility in soil

α-methylstyrene (98-83-9)	
Ecology - soil	moderately.

maleic anhydride (108-31-6)	
Ecology - soil	No data available.

styrene (100-42-5)	
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	352

Ecology - soil	moderately.

12.5. Results of PBT and vPvB

POLIMAL® 122-1 POLIMAL® 122-2 and series
The product does not meet the PBT and vPvB classification criteria

12.6. Endocrine disrupting properties

Adverse effects on the environment caused by endocrine disrupting properties:
The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

12.7. Other Adverse Effects

No additional information available

13. Disposal Considerations

13.1. Waste Treatment Methods

Regional waste regulation:

Act of 14 December 2012 on waste(J.o.L. 2013, item 322 as amended; consolidated text J.o.L. 2020, item 797). Act of 13 June 2013 on the management of packaging and

packaging waste(J.o.L. 2013, item 888 as amended; consolidated text J.o.L. 2020, item 1114). Regulation of the Minister of Climate of 2 January 2020 on the catalogue of waste(J.o. L 2020, article 10).

Waste treatment methods:

The holder of product waste and packaging waste is obliged to handle the waste in a manner consistent with the principles of waste management specified in the Act on the management of packaging and packaging waste, the Act on waste and environmental protection requirements. The resulting product waste and packaging waste should be stored, transported, collected and recovered, including recycling or neutralization, in accordance with the provisions of the Act on waste and related regulations. Unused product as well as contaminated packaging should be sent to an entity authorized to collect hazardous waste. The waste classification should be applied, using the appropriate codes and names in accordance with the applicable waste catalog. The disposal of waste to soil and ground, sewage systems, rivers, water reservoirs is prohibited. Dispose of contents/container in accordance with licensed collector's sorting instructions.

14. Transport Information

ADR	IMDG	IATA	ADN	RID
14.1. UN number or ID number				
UN 1866	UN 1866	UN 1866	UN 1866	UN 1866
14.2. UN proper shipping name				
RESIN SOLUTION (flammable)	RESIN SOLUTION (flammable)	Resin solution (flammable)	RESIN SOLUTION (flammable)	RESIN SOLUTION (flammable)
Transport document description				
UN 1866 RESIN SOLUTION (flammable), 3, III, (D/E)	UN 1866 RESIN SOLUTION (flammable), 3, III	UN 1866 Resin solution (flammable), 3, III	UN 1866 RESIN SOLUTION (flammable), 3, III	UN 1866 RESIN SOLUTION (flammable), 3, III

14.3. Transport hazard class(es)				
3	3	3	3	3
				
14.4. Packing group				
III	III	III	III	III
14.5. Environmental hazards				
Dangerous for the environment : No	Dangerous for the environment : No Marine pollutant : No	Dangerous for the environment : No	Dangerous for the environment : No	Dangerous for the environment : No
No supplementary information available				

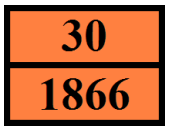
14.6. Special precautions for user

ADR not applicable:

Mixtures:Polimal 122-1, Polimal 122-2, Polimal 1222, Polimal 122-2 U, Polimal 122-2 LP, Polimal 122-20, Polimal 122-20 P, Polimal 122-21, Polimal 122-21 AWTP, Polimal 122-22, Polimal 122-24, Polimal 122-25 TP, Polimal 122-26 X, Polimal 122-2 T, Polimal 122-2 P, Polimal 122-2 TP, Polimal 122-2 TP-2, Polimal 122-2 A, Polimal 122-2 AP, Polimal 122-2 AT, Polimal 122-2 ATP, Polimal 122-2 WTP, Polimal 122-2 WTP-2, Polimal 122-2 WTPS, Polimal 122-2 AWTP, Polimal 122-2 AWTP-2, Polimal 122-2 KWTP, Polimal 122-28. packed in vessels with a capacity of not more than 450 litres are not subject to the ADR rules under clause 2.2.3.1.5 of the European ADR Agreement (see section 15.1 of this charter).

Overland transport

Transport regulations (ADR) : Transport in accordance with section 2.2.3.1.5 of the ADR (viscous substance) may be applied

Classification code (ADR)	: F1
Limited quantities (ADR)	: 5l
Excepted quantities (ADR)	: E1
Packing instructions (ADR)	: P001, IBC03, LP01, R001
Special packing provisions (ADR)	: PP1
Mixed packing provisions (ADR)	: MP19
Portable tank and bulk container instructions (ADR)	: T2
Portable tank and bulk container special provisions (ADR)	: TP1
Tank code (ADR)	: LGBF
Vehicle for tank carriage	: FL
Transport category (ADR)	: 3
Special provisions for carriage - Packages (ADR)	: V12
Special provisions for carriage - Operation (ADR)	: S2
Hazard identification number (Kemler No.)	: 30
Orange plates	: 
Tunnel restriction code (ADR)	: D/E

Transport by sea

Special provisions (IMDG)	: 223, 955
Limited quantities (IMDG)	: 5 L
Excepted quantities (IMDG)	: E1
Packing instructions (IMDG)	: P001, LP01
Special packing provisions (IMDG)	: PP1
IBC packing instructions (IMDG)	: IBC03
Tank instructions (IMDG)	: T2
Tank special provisions (IMDG)	: TP1
EmS-No. (Fire)	: F-E

EmS-No. (Spillage)	: S-E
Stowage category (IMDG)	: A
Properties and observations (IMDG)	: Miscibility with water depends upon the composition.

Air transport

PCA Excepted quantities (IATA)	: E1
PCA Limited quantities (IATA)	: Y344
PCA limited quantity max net quantity (IATA)	: 10L
PCA packing instructions (IATA)	: 355
PCA max net quantity (IATA)	: 60L
CAO packing instructions (IATA)	: 366
CAO max net quantity (IATA)	: 220L
Special provisions (IATA)	: A3
ERG code (IATA)	: 3L

Inland waterway transport

Classification code (ADN)	: F1
Limited quantities (ADN)	: 5 L
Excepted quantities (ADN)	: E1
Equipment required (ADN)	: PP, EX, A
Ventilation (ADN)	: VE01
Number of blue cones/lights (ADN)	: 0

Rail transport

Classification code (RID)	: F1
Limited quantities (RID)	: 5L
Excepted quantities (RID)	: E1
Packing instructions (RID)	: P001, IBC03, LP01, R001
Special packing provisions (RID)	: PP1

Mixed packing provisions (RID) : MP19
Portable tank and bulk container instructions (RID) : T2
Portable tank and bulk container special provisions (RID) : TP1
Tank codes for RID tanks (RID) : LGBF
Transport category (RID) : 3
Special provisions for carriage – Packages (RID) : W12
Colis express (express parcels) (RID) : CE4
Hazard identification number (RID) : 30

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

15. Regulatory Information

15.1. Safety, Health And Environmental Regulations / Legislation Specific For The Substance Or Mixture

15.1.1. EU-Regulations

Listed on REACH Annex XVII (Restriction Conditions). The following restrictions are applicable:		
Reference code	Applicable on	Entry title or description
3(a)	POLIMAL® 122-1 POLIMAL® 122-2 and series ; α-methylstyrene ; styrene	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 2.1 to 2.4, 2.6 and 2.7, 2.8 types A and B, 2.9, 2.10, 2.12, 2.13 categories 1 and 2, 2.14 categories 1 and 2, 2.15 types A to F

3(b)	POLIMAL® 122-1 POLIMAL® 122-2 and series ; α-methylstyrene ; styrene	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10
3(c)	POLIMAL® 122-1 POLIMAL® 122-2 and series ; α-methylstyrene ; styrene	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard class 4.1
40.	α-methylstyrene ; styrene	Substances classified as flammable gases category 1 or 2, flammable liquids categories 1, 2 or 3, flammable solids category 1 or 2, substances and mixtures which, in contact with water, emit flammable gases, category 1, 2 or 3, pyrophoric liquids category 1 or pyrophoric solids category 1, regardless of whether they appear in Part 3 of Annex VI to Regulation (EC) No 1272/2008 or not.

Contains no substance(s) listed on the REACH Candidate List
Contains no substance(s) listed on REACH Annex XIV (Authorisation List)
Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)
Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

15.1.2. National regulations Poland

Polish National Regulations - Overwrite:

Regulation of the Minister of Climate of 2 January 2020 on the catalogue of waste(J.o. L 2020, article 10). Regulation of the Minister of Family, Labour and Social Policy of 12 June 2018 on the highest permissible concentration and intensity of noxious agents for health at work environment (J. o L. item 1286 as amended).
Regulation of the Minister of Health of 20 April 2012 on labelling of hazardous substances and hazardous mixtures and certain mixtures (consolidated text: J. o L. 2015, item 450). Regulation (EC) No 1272/2008 of the European Parliament and

of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.
Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC.
The ADR Agreement - Annex to the J. o L. of 26 April 2019 Government Statement of 18 February 2019 on the entry into force of the amendments to Annex A and B to the European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR), signed in Geneva on 30 September 1957 (J. o L. 2019, item 769).
Act of 19 August 2011 on the Carriage of Dangerous Goods (J. o L. 2011 No. 227, item 1367 as amended).
Act of 25 February 2011 on chemical substances and their mixtures (J. o L. No. 63, item 322 as amended).

15.2. Chemical Safety Assessment

No chemical safety assessment has been carried out

16. Other Information

Abbreviations and acronyms:	
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
COD	Chemical oxygen demand (COD)
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number
EC50	Median effective concentration
EN	European Standard
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development

OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
VOC	Volatile Organic Compounds
CAS-No.	Chemical Abstract Service number
N.O.S.	Not Otherwise Specified
vPvB	Very Persistent and Very Bioaccumulative
ED	Endocrine disruptor

Data sources : ECHA (European Chemicals Agency). Own research of the mixture. Safety data sheets of suppliers / producers of mixture ingredients.

Training advice : Before starting work with the product, the user should read this safety data sheet, the health and safety rules for handling chemicals, and in particular, undergo appropriate workplace training pursuant to the provisions of the Act - Labor Code.

Other information : The above information is based on the current data characterizing the product as well as the experience and

knowledge of the manufacturer in this field. They do not constitute a quality description of a product or a promise of specific properties. They should be treated as an aid for safe handling in transport, storage and use of the product. This does not release the user from responsibility for the improper use of the above information and from compliance with all legal standards in this field.

Full text of H- and EUH-statements:	
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Chronic 2	Hazardous to the aquatic environment – Chronic Hazard, Category 2
Aquatic Chronic 3	Hazardous to the aquatic environment – Chronic Hazard, Category 3
Asp. Tox. 1	Aspiration hazard, Category 1
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 3	Flammable liquids, Category 3
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
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.
H332	Harmful if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
H361	Suspected of damaging fertility or the unborn child.
H361d	Suspected of damaging the unborn child.
H372	Causes damage to organs through prolonged or repeated exposure.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
Repr. 2	Reproductive toxicity, Category 2
Resp. Sens. 1	Respiratory sensitisation, Category 1
Skin Corr. 1B	Skin corrosion/irritation, Category 1, Sub-Category 1B
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
Skin Sens. 1A	Skin sensitisation, category 1A
STOT RE 1	Specific target organ toxicity – Repeated exposure, Category 1
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:		
Flam. Liq. 3	H226	On basis of test data
Skin Irrit. 2	H315	Calculation method
Eye Irrit. 2	H319	Calculation method
Skin Sens. 1	H317	Calculation method
Repr. 2	H361d	Calculation method
STOT SE 3	H335	Calculation method
STOT RE 1	H372	Calculation method
Aquatic Chronic 3	H412	Calculation method

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The 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, unless specified in the text.

End of Safety Data Sheet