

SAFETY DATA SHEET

RESION Polyester Laminating Resin

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

1.1. Product identifier

Trade name

RESION Polyester Laminating Resin

Product no.

PR01

Unique formula identifier (UFI)

2M00-A06D-Y005-AJU3

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

Relevant identified uses of the substance or mixture

Binder

Uses advised against

None known.

1.3. Details of the supplier of the safety data sheet

Company and address

T-ISS BV

Storkstraat 1
2722 NN Zoetermeer
Netherlands
+31 79 330 1000

Contact person

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E-mail

www.t-iss.com

Revision

13/12/2023

SDS Version

4.0

Date of previous version

05/10/2022 (3.0)

1.4. Emergency telephone number

Contact The National Poisons Information Service (dial 111, 24 h service).
See section 4 "First aid measures".

SECTION 2: Hazards identification

Classified according to Regulation (EC) No. 1272/2008 (CLP) as retained and amended in UK law.

2.1. ▼ Classification of the substance or mixture

Flam. Liq. 3; H226, Flammable liquid and vapour.

Skin Irrit. 2; H315, Causes skin irritation.

Skin Sens. 1; H317, May cause an allergic skin reaction.

Eye Irrit. 2; H319, Causes serious eye irritation.

STOT SE 3; H335, May cause respiratory irritation.

Repr. 2; H361, Suspected of damaging fertility or the unborn child.

STOT RE 1; H372, Causes damage to organs through prolonged or repeated exposure.

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

Aquatic Chronic 3; H412, Harmful to aquatic life with long lasting effects.

2.2. Label elements

Hazard pictogram(s)



Signal word

Danger

▼ Hazard statement(s)

Flammable liquid and vapour. (H226)
 Causes skin irritation. (H315)
 May cause an allergic skin reaction. (H317)
 Causes serious eye irritation. (H319)
 May cause respiratory irritation. (H335)
 Suspected of damaging fertility or the unborn child. (H361)
 Causes damage to organs through prolonged or repeated exposure. (H372)
 Harmful to aquatic life with long lasting effects. (H412)

Precautionary statement(s)

General

If medical advice is needed, have product container or label at hand. (P101)
 Keep out of reach of children. (P102)

Prevention

Do not breathe vapour/mist. (P260)
 Do not eat, drink or smoke when using this product. (P270)

Response

IF exposed or concerned: Get medical advice/attention. (P308+P313)
 Get medical advice/attention if you feel unwell. (P314)

Storage

Store locked up. (P405)

▼ Disposal

Dispose of contents/container in accordance with local regulation (P501)

Hazardous substances

styrene
 Fatty acids, C6-19-branched, cobalt(2+) salts
 maleic anhydride

▼ Additional labelling

UFI: 2M00-A06D-Y005-AJU3

VOC

VOC content: 476 g/L
 MAXIMUM VOC CONTENT (Phase II, category A/i (SB): 500 g/L)

2.3. Other hazards

▼ Additional warnings

This mixture/product does not contain any substances known to fulfil the criteria for PBT and vPvB classification.
 This product does not contain any substances considered to be endocrine disruptors in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

SECTION 3: Composition/information on ingredients

3.1. ▼ Substances

Not applicable. This product is a mixture.

3.2. ▼ Mixtures

Product/substance	Identifiers	% w/w	Classification	Note
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According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

styrene	CAS No.: 100-42-5 EC No.: 202-851-5 UK-REACH: Index No.: 601-026-00-0	40-60%	Flam. Liq. 3, H226 Asp. Tox. 1, H304 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Acute Tox. 4, H332 STOT SE 3, H335 Repr. 2, H361 STOT RE 1, H372 Aquatic Chronic 3, H412	
Fatty acids, C6-19-branched, cobalt(2+) salts	CAS No.: 68409-81-4 EC No.: 270-066-5 UK-REACH: Index No.:	<0.25%	Acute Tox. 4, H302 Skin Irrit. 2, H315 Skin Sens. 1, H317 Aquatic Chronic 2, H411	[19]
methanol	CAS No.: 67-56-1 EC No.: 200-659-6 UK-REACH: Index No.: 603-001-00-X	<0.25%	Flam. Liq. 2, H225 Acute Tox. 3, H301 Acute Tox. 3, H311 Acute Tox. 3, H331 STOT SE 1, H370 STOT SE 2, H371 (SCL: 3.00 %)	[1], [3]
maleic anhydride	CAS No.: 108-31-6 EC No.: 203-571-6 UK-REACH: Index No.: 607-096-00-9	<0.05%	EUH071 Acute Tox. 4, H302 Skin Corr. 1B, H314 Skin Sens. 1A, H317 (SCL: 0.001 %) Eye Dam. 1, H318 Resp. Sens. 1, H334 STOT RE 1, H372	

See full text of H-phrases in section 16. Occupational exposure limits are listed in section 8, if these are available.

Other information

[1] European occupational exposure limit.

[3] According to UK REACH, Annex XVII, the substance is subject to restrictions.

[19] UVCB = Unknown or variable composition, complex reaction products or of biological materials

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

In the case of accident: Contact a doctor or casualty department – take the label or this safety data sheet. Contact a doctor if in doubt about the injured person's condition or if the symptoms persist. Never give an unconscious person water or other drink.

▼ Inhalation

Upon breathing difficulties or irritation of the respiratory tract: Bring the person into fresh air and stay with him/her.

Skin contact

Remove contaminated clothing and shoes immediately. Ensure to wash exposed skin thoroughly with water and soap. Skin cleanser can be used. DO NOT use solvents or thinners.

If skin irritation occurs: Get medical advice/attention.

▼ Eye contact

If in eyes: Flush eyes immediately with plenty of water or isotonic water (20-30 °C) for at least 5 minutes and continue until irritation stops. Remove contact lenses. Make sure to flush under upper and lower eyelids. If irritation continues, contact a doctor. Continue flushing during transport.

▼ Ingestion

If the person is conscious, rinse the mouth with water and stay with the person. Never give the person anything to drink.

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

In case of malaise, seek medical advice immediately and bring the safety data sheet or label from the product. Do not induce vomiting, unless recommended by the doctor. Have the person lean forward with head down to avoid inhalation of or choking on vomited material.

Burns

Rinse with water until pain stops then continue to rinse for 30 minutes.

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

Sensitisation: This product contains substances, which may trigger allergic reaction upon dermal contact.

Manifestation of allergic reactions typically takes place within 12-72 hours after exposure.

Neurotoxic effects: This product contains organic solvents, which may cause adverse effects to the nervous system.

Symptoms of neurotoxicity include: loss of appetite, headache, dizziness, ringing in ears, tingling sensations of skin, sensitivity to the cold, cramps, difficulty in concentrating, tiredness, etc. Repeated exposure to solvents can result in the breaking down of the skin's natural fat layer and may result in an increased absorption potential of other hazardous substances at the area of exposure.

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

IF exposed or concerned:

Get immediate medical advice/attention.

Information to medics

Bring this safety data sheet or the label from this product.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media: Alcohol-resistant foam, carbon dioxide, powder, water mist.

Unsuitable extinguishing media: Waterjets should not be used, since they can spread the fire.

5.2. ▼ Special hazards arising from the substance or mixture

Flammable liquid and vapour.

In use may form flammable/explosive vapour-air mixture.

Fire will result in dense smoke. Exposure to combustion products may harm your health. Closed containers, which are exposed to fire, should be cooled with water. Do not allow fire-extinguishing water to enter the sewage system and nearby surface waters.

If the product is exposed to high temperatures, e.g. in the event of fire, dangerous decomposition compounds are produced. These are:

Carbon oxides (CO / CO₂)

5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective clothing to prevent contact. Upon direct exposure contact

The National Poisons Information Service (dial 111, 24 h service) in order to obtain further advice.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Storages not yet ignited must be cooled by water mist. Remove flammable materials if conditions allow it. Ensure sufficient ventilation.

Avoid direct contact with spilled substances.

Ensure adequate ventilation, especially in confined areas.

Avoid inhalation of vapours from spilled material.

Contaminated areas may be slippery.

6.2. Environmental precautions

Avoid discharge to lakes, streams, sewers, etc. In the event of leakage to the surroundings, contact local environmental authorities.

6.3. ▼ Methods and material for containment and cleaning up

Limit spillage and collect using granular absorbent or similar materials, and dispose of it in accordance with the regulations on dangerous waste.

Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.

Wherever possible cleaning should be performed with normal cleaning agents. Avoid use of solvents.

6.4. Reference to other sections

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

See section 13 "Disposal considerations" on handling of waste.
See section 8 "Exposure controls/personal protection" for protective measures.

SECTION 7: Handling and storage

7.1. ▼ Precautions for safe handling

Ground and bond container and receiving equipment.
Use explosion-proof [electrical/lighting/ventilating] equipment.
Use non-sparking tools.
Take action to prevent static discharges.
It is recommended to install waste collection trays in order to prevent emissions to the waste water system and surrounding environment.
The product should be tested for peroxide formation or discarded after 6 months.
Avoid direct contact with the product.
Peroxide formation may be present anywhere in the container, including the sides, bottom, exterior and threaded cap. Peroxide formation in ppm concentrations may not be visually observable and must be identified through the use of appropriate testing procedures. If any of the following conditions exist, the material may be explosively unstable and will require stabilization prior to use:

1. Material appears to be degraded and or contaminated.
2. Material appears to be discolored.
3. Deterioration or distortion of storage container.
4. Thermal shock (sunlight).
5. Age of material exceeds recommended storage time.

Avoid contact during pregnancy and while nursing.
Smoking, drinking and consumption of food is not allowed in the work area.
See section 8 "Exposure controls/personal protection" for information on personal protection.

7.2. Conditions for safe storage, including any incompatibilities

Store in tightly closed containers and store protected from moisture and light. Containers should be dated when opened and tested periodically for the presence of peroxides. Do not exceed storage time limits.
Containers that have been opened must be carefully resealed and kept upright to prevent leakage.
Take action to prevent static discharges.
Must be stored in a cool and well-ventilated area, away from possible sources of ignition.

Recommended storage material

Always store in containers of the same material as the original container.

Storage temperature

Dry, cool and well ventilated

Incompatible materials

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

7.3. ▼ Specific end use(s)

This product should only be used for applications quoted in section 1.2.

SECTION 8: Exposure controls/personal protection

8.1. ▼ Control parameters

styrene
Long term exposure limit (8 hours) (ppm): 100
Long term exposure limit (8 hours) (mg/m³): 430
Short term exposure limit (15 minutes) (ppm): 250
Short term exposure limit (15 minutes) (mg/m³): 1080

Fatty acids, C6-19-branched, cobalt(2+) salts
Long term exposure limit (8 hours) (mg/m³): 0,1 (as Co)

methanol
Long term exposure limit (8 hours) (ppm): 200
Long term exposure limit (8 hours) (mg/m³): 266
Short term exposure limit (15 minutes) (ppm): 250
Short term exposure limit (15 minutes) (mg/m³): 333

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

Annotations:

Sk = Can be absorbed through the skin and lead to systemic toxicity.

maleic anhydride

Long term exposure limit (8 hours) (mg/m³): 1

Short term exposure limit (15 minutes) (mg/m³): 3

Annotations:

Sen = Capable of causing occupational asthma.

The Control of Substances Hazardous to Health Regulations 2002. SI 2002/2677 The Stationery Office 2002.
EH40/2005 Workplace exposure limits (Fourth Edition 2020).

▼ **DNEL**

maleic anhydride

Duration:	Route of exposure:	DNEL:
Long term – Local effects - Workers	Inhalation	0,4 mg/m ³
Long term – Systemic effects - Workers	Inhalation	0,4 mg/m ³
Short term – Local effects - Workers	Inhalation	0,8 mg/m ³
Short term – Systemic effects - Workers	Inhalation	0,8 mg/m ³

methanol

Duration:	Route of exposure:	DNEL:
Long term – Systemic effects - General population	Dermal	4 mg/kg/day
Long term – Systemic effects - General population	Dermal	4 mg/kg bw/day
Long term – Systemic effects - Workers	Dermal	20 mg/kg/day
Long term – Systemic effects - Workers	Dermal	20 mg/kg bw/day
Short term – Systemic effects - General population	Dermal	4 mg/kg/day
Short term – Systemic effects - General population	Dermal	4 mg/kg bw/day
Short term – Systemic effects - Workers	Dermal	20 mg/kg/day
Short term – Systemic effects - Workers	Dermal	20 mg/kg bw/day
Long term – Local effects - General population	Inhalation	26 mg/m ³
Long term – Local effects - General population	Inhalation	26 mg/m ³
Long term – Local effects - Workers	Inhalation	130 mg/m ³
Long term – Local effects - Workers	Inhalation	130 mg/m ³
Long term – Systemic effects - General population	Inhalation	26 mg/m ³
Long term – Systemic effects - General population	Inhalation	26 mg/m ³
Long term – Systemic effects - Workers	Inhalation	130 mg/m ³
Long term – Systemic effects - Workers	Inhalation	130 mg/m ³
Short term – Local effects - General population	Inhalation	26 mg/m ³
Short term – Local effects - Workers	Inhalation	130 mg/kg/day
Short term – Local effects - Workers	Inhalation	130 mg/m ³
Short term – Systemic effects - General population	Inhalation	26 mg/m ³
Short term – Systemic effects - General population	Inhalation	26 mg/m ³
Short term – Systemic effects - Workers	Inhalation	130 mg/m ³
Short term – Systemic effects - Workers	Inhalation	130 mg/m ³
Long term – Systemic effects - General population	Oral	4 mg/kg/day
Long term – Systemic effects - General population	Oral	4 mg/kg bw/day
Short term – Systemic effects - General population	Oral	4 mg/kg/day

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

Short term – Systemic effects - General population	Oral	4 mg/kg bw/day
styrene		
Duration:	Route of exposure:	DNEL:
Long term – Systemic effects - General population	Dermal	343 mg/kg/day
Long term – Systemic effects - General population	Dermal	343 mg/kg bw/day
Long term – Systemic effects - Workers	Dermal	406 mg/kg/day
Long term – Systemic effects - Workers	Dermal	406 mg/kg bw/day
Long term – Local effects - General population	Inhalation	1 mg/m ³
Long term – Local effects - Workers	Inhalation	100 mg/m ³
Long term – Systemic effects - General population	Inhalation	10,2 mg/m ³
Long term – Systemic effects - General population	Inhalation	1 mg/m ³
Long term – Systemic effects - Workers	Inhalation	85 mg/m ³
Long term – Systemic effects - Workers	Inhalation	85 mg/m ³
Short term – Local effects - General population	Inhalation	182,75 mg/m ³
Short term – Local effects - General population	Inhalation	10 mg/m ³
Short term – Local effects - Workers	Inhalation	306 mg/m ³
Short term – Local effects - Workers	Inhalation	100 mg/m ³
Short term – Systemic effects - General population	Inhalation	174,25 mg/m ³
Short term – Systemic effects - General population	Inhalation	10 mg/m ³
Short term – Systemic effects - Workers	Inhalation	289 mg/m ³
Short term – Systemic effects - Workers	Inhalation	100 mg/m ³
Long term – Systemic effects - General population	Oral	2,1 mg/kg/day
Long term – Systemic effects - General population	Oral	7.7 µg/kgbw/day

▼ PNEC

maleic anhydride

Route of exposure:	Duration of Exposure:	PNEC:
Freshwater	Single	0,1 mg/L
Freshwater sediment	Single	0,334 mg/kg
Marine water	Single	0,01 mg/L
Marine water sediment	Single	0,033 mg/kg
Sewage treatment plant	Single	44,6 mg/L
Soil	Single	0,0415 mg/kg

methanol

Route of exposure:	Duration of Exposure:	PNEC:
Freshwater	Single	20,8 mg/L
Freshwater sediment	Single	77 mg/kg
Intermittent release	Single	1540 mg/L
Marine water	Single	2,08 mg/L
Marine water sediment	Single	7,7 mg/kg
Sewage treatment plant	Single	100 mg/L
Soil	Single	100 mg/kg

styrene

Route of exposure:	Duration of Exposure:	PNEC:
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According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

Freshwater	Single	0,028 mg/L
Freshwater		28-40 µg/L
Freshwater sediment	Single	0,614 mg/kg
Freshwater sediment		418-614 µg/kg
Intermittent release	Single	0,04 mg/L
Intermittent release (freshwater)		40 µg/L
Marine water	Single	0,014 mg/L
Marine water		14-40 µg/L
Marine water sediment	Single	0,307 mg/kg
Marine water sediment		307-418 µg/kg
Sewage treatment plant	Single	5 mg/L
Sewage treatment plant		5 mg/L
Soil	Single	0,2 mg/kg
Soil		146-200 µg/kg

8.2. ▼ Exposure controls

Compliance with the given occupational exposure limits values should be controlled on a regular basis.

General recommendations

Smoking, drinking and consumption of food is not allowed in the work area.

Exposure scenarios

There are no exposure scenarios implemented for this product.

Exposure limits

Professional users are subjected to the legally set maximum concentrations for occupational exposure. See occupational hygiene limit values above.

▼ Appropriate technical measures

Do not recirculate outlet air that contain the substances.

The formation of vapours must be kept at a minimum and below current limit values (see above). Installation of a local exhaust system if normal air flow in the work room is not sufficient is recommended. Ensure eyewash and emergency showers are clearly marked.

Apply standard precautions during use of the product. Avoid inhalation of vapours.

Hygiene measures

Take off contaminated clothing and wash it before reuse.

Measures to avoid environmental exposure

Keep damming materials near the workplace. If possible, collect spillage during work.

Individual protection measures, such as personal protective equipment

Generally

Use only UKCA marked protective equipment.

Respiratory Equipment

Type	Class	Colour	Standards
A	Class 2 (medium capacity)	Brown	EN14387



Skin protection

Recommended	Type/Category	Standards
Dedicated work clothing should be worn	-	-



Hand protection

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

Material	Glove thickness (mm)	Breakthrough time (min.)	Standards
Nitrile	0.4	> 480	EN374-2, EN374-3, EN388



Eye protection

Type	Standards
Safety glasses with side shields.	EN166



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state

Liquid

Colour

Blue

Odour / Odour threshold

Sharp/pungent

pH

Testing not relevant or not possible due to the nature of the product.

Density (g/cm³)

1.13

Kinematic viscosity

2400 mPa.s

Particle characteristics

Does not apply to liquids.

Phase changes

Melting point/Freezing point (°C)

Testing not relevant or not possible due to the nature of the product.

Softening point/range (waxes and pastes) (°C)

Does not apply to liquids.

Boiling point (°C)

>100

Vapour pressure

6.5 hPa

Relative vapour density

Testing not relevant or not possible due to the nature of the product.

Decomposition temperature (°C)

Testing not relevant or not possible due to the nature of the product.

Data on fire and explosion hazards

Flash point (°C)

34

▼ Flammability (°C)

The material is ignitable.

Auto-ignition temperature (°C)

Testing not relevant or not possible due to the nature of the product.

Lower and upper explosion limit (% v/v)

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

1.1 - 6.1

Solubility

Solubility in water

Testing not relevant or not possible due to the nature of the product.

n-octanol/water coefficient (LogKow)

Testing not relevant or not possible due to the nature of the product.

Solubility in fat (g/L)

Testing not relevant or not possible due to the nature of the product.

9.2. Other information

VOC (g/L)

476

Other physical and chemical parameters

No data available.

▼ Oxidizing properties

Testing not relevant or not possible due to the nature of the product.

SECTION 10: Stability and reactivity

10.1. Reactivity

Highly reactive and can auto-polymerize as a result of internal peroxide accumulation. The peroxides formed in these reactions are extremely shock- and heat-sensitive.

10.2. Chemical stability

The product is stable under the conditions, noted in section 7 "Handling and storage".

10.3. Possibility of hazardous reactions

None known.

10.4. Conditions to avoid

Avoid static electricity.

Do not expose to any forms of heat (e.g. solar radiation). May lead to excess pressure.

10.5. Incompatible materials

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

10.6. Hazardous decomposition products

The product is not degraded when used as specified in section 1.

SECTION 11: Toxicological information

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

▼ Acute toxicity

Product/substance	styrene
Species:	Rat
Route of exposure:	Oral
Test:	LD50
Result:	>5000 mg/kgbw

Product/substance	styrene
Species:	Rat
Route of exposure:	Dermal
Test:	LD50
Result:	>2000 mg/kgbw

Product/substance	Fatty acids, C6-19-branched, cobalt(2+) salts
Species:	Rat
Route of exposure:	Oral
Test:	LD50
Result:	900 - 1200 mg/kgbw

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

Product/substance	methanol
Species:	Rat
Route of exposure:	Oral
Test:	LD50
Result:	>5600 mg/kgbw

Product/substance	methanol
Species:	Rabbit
Route of exposure:	Dermal
Test:	LD50
Result:	15800 mg/kgbw

Product/substance	methanol
Species:	Rat
Route of exposure:	Inhalation
Test:	LC50 (4 hours)
Result:	83,78 mg/L

Product/substance	maleic anhydride
Species:	Rat
Route of exposure:	Oral
Test:	LD50
Result:	1090 mg/kgbw

Product/substance	maleic anhydride
Species:	Rabbit
Route of exposure:	Dermal
Test:	LD50
Result:	2620 mg/kgbw

Skin corrosion/irritation

Causes skin irritation.

Serious eye damage/irritation

Causes serious eye irritation.

Respiratory sensitisation

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

Skin sensitisation

May cause an allergic skin reaction.

Germ cell mutagenicity

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

Carcinogenicity

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

Reproductive toxicity

Suspected of damaging fertility or the unborn child.

STOT-single exposure

May cause respiratory irritation.

STOT-repeated exposure

Causes damage to organs through prolonged or repeated exposure.

Aspiration hazard

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

11.2. Information on other hazards

Long term effects

Reproductive toxicity: This product contains teratogenic substances, which may produce anomalies and/or developmental defects to the human offspring. Adverse effects include: death, growth retardation, congenital disorders, delayed mental development, and functional disorders. This product contains reprotoxic substances, which may harm the reproductive capacity. Adverse effects include: sterility, effects on the sexual function, lowered effective fertility and dysfunctional menstrual cycle.

Irritation effects: This product contains substances, which may cause irritation upon exposure to skin, eyes or lungs. Exposure may result in an increased absorption potential of other hazardous substances at the area of exposure.

Neurotoxic effects: This product contains organic solvents, which may cause adverse effects to the nervous system. Symptoms of neurotoxicity include: loss of appetite, headache, dizziness, ringing in ears, tingling sensations of skin, sensitivity to the cold, cramps, difficulty in concentrating, tiredness, etc. Repeated exposure to solvents can result in the breaking down of the skin's natural fat layer and may result in an increased absorption potential of other hazardous substances at the area of exposure.

▼ Endocrine disrupting properties

This mixture/product does not contain any substances known to have hormone-disrupting properties in relation to health.

▼ Other information

styrene has been classified by IARC as a group 2A carcinogen.

Fatty acids, C6-19-branched, cobalt(2+) salts has been classified by IARC as a group 2B carcinogen.

SECTION 12: Ecological information

12.1. ▼ Toxicity

Product/substance	styrene
Species:	Fish
Duration:	96 hours
Test:	LC50
Result:	3,24 - 4,99 mg/L

Product/substance	styrene
Species:	Daphnia
Duration:	48 hours
Test:	EC50
Result:	4,7 mg/L

Product/substance	styrene
Species:	Daphnia
Duration:	21 days
Test:	NOEC
Result:	1,01 mg/L

Product/substance	styrene
Species:	Daphnia
Duration:	96 hours
Test:	LC50
Result:	9,5 mg/L

Product/substance	styrene
Species:	Algae
Duration:	96 hours
Test:	EC50
Result:	6,3 mg/L

Product/substance	methanol
Species:	Fish
Duration:	96 hours
Test:	LC50
Result:	13500 - 17600 mg/L

Product/substance	methanol
Species:	Fish
Duration:	96 hours
Test:	LC50
Result:	19500 - 20700 mg/L

Product/substance	methanol
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According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

Species:	Fish
Duration:	96 hours
Test:	LC50
Result:	28200 mg/L

Product/substance	maleic anhydride
Species:	Fish
Duration:	96 hours
Test:	LC50
Result:	75 mg/L

Product/substance	maleic anhydride
Species:	Daphnia
Duration:	48 hours
Test:	EC50
Result:	42,81 mg/L

Product/substance	maleic anhydride
Species:	Daphnia
Duration:	21 days
Test:	NOEC
Result:	10 mg/L

Product/substance	maleic anhydride
Species:	Algae
Duration:	72 hours
Test:	EC50
Result:	74,32 mg/L

Product/substance	maleic anhydride
Species:	Algae
Duration:	72 hours
Test:	EC10
Result:	11,8 mg/L

Harmful to aquatic life with long lasting effects.

12.2. Persistence and degradability

No data available.

12.3. ▼ Bioaccumulative potential

Product/substance	styrene
Potential bioaccumulation:	No data available.
LogKow:	2.95
BCF:	No data available.

Product/substance	methanol
Potential bioaccumulation:	No data available.
LogKow:	-0,77
BCF:	No data available.

Product/substance	maleic anhydride
Potential bioaccumulation:	No data available.
LogKow:	-2,16
BCF:	No data available.

12.4. Mobility in soil

No data available.

12.5. ▼ Results of PBT and vPvB assessment

This mixture/product does not contain any substances known to fulfil the criteria for PBT and vPvB classification.

12.6. ▼ Endocrine disrupting properties

This mixture/product does not contain any substances considered to have endocrine-disrupting properties in relation to the environment.

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

12.7. Other adverse effects

This product contains substances, which may cause adverse long-term effects to the aquatic environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product is covered by the regulations on hazardous waste. (*)

To the extent the material has not been subject to regular tests of peroxide formation the waste shall be treated as explosive waste.

HP 3 - Flammable

HP 4 - Irritant (skin irritation and eye damage)

HP 5 - Specific Target Organ Toxicity (STOT)/Aspiration Toxicity

HP 6 - Acute toxicity

HP 10 – Toxic for reproduction

HP 14 – Ecotoxic

Dispose of contents/container to an approved waste disposal plant.

Regulation (EU) No 1357/2014 of 18 December 2014 on waste as retained and amended in UK law.




▼ EWC code

07 02 04* Other organic solvents, washing liquids and mother liquors

Contaminated packing

Packaging containing residues of the product must be disposed of similarly to the product.

SECTION 14: Transport information

	14.1 UN / ID	14.2 UN proper shipping name	14.3 Hazard class(es)	14.4 PG*	14.5 Env**	Other information:
ADR	UN1866	RESIN SOLUTION	Transport hazard class: 3 Label: 3 Classification code: F1 	III	No	Limited quantities: 5 L Tunnel restriction code: (D/E) See below for additional information.
IMDG	UN1866	RESIN SOLUTION	Transport hazard class: 3 Label: 3 Classification code: F1 	III	No	Limited quantities: 5 L EmS: F-E S-E See below for additional information.
IATA	UN1866	RESIN SOLUTION	Transport hazard class: 3 Label: 3 Classification code: F1 	III	No	See below for additional information.

* Packing group

** Environmental hazards

Additional information

ADR / See Table A, section 3.2.1 for any information on special provisions, requirements, or warnings in connection with transport. See section 5.4.3, for instructions in writing regarding mitigation of damages in relation to incidents or accidents during transport.

IMDG / See section 3.2.1, for any information on special provisions, requirements, or warnings in connection with transport.

IATA / See Table 4.2 for any information on special provisions, requirements, or warnings in connection with

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

transport.

This product is within scope of the regulations of transport of dangerous goods.

14.6. Special precautions for user

Not applicable.

14.7. Maritime transport in bulk according to IMO instruments

No data available.

SECTION 15: Regulatory information

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

Restrictions for application

People under the age of 18 shall not be exposed to this product.

Pregnant women and women breastfeeding must not be exposed to this product. The risk, and possible technical precautions or design of the workplace needed to eliminate exposure, must be considered.

Demands for specific education

No specific requirements.

SEVESO - Categories / dangerous substances

P5c - FLAMMABLE LIQUIDS, Qualifying quantity (lower-tier): 5.000 tonnes / (upper-tier): 50.000 tonnes
methanol

REACH, Annex XVII

RESION Polyester Laminating Resin is subject to UK-REACH restrictions, UK-REACH annex XVII (entry 3).
methanol is subject to restrictions, UK-REACH annex XVII (entry 69).

RESION Polyester Laminating Resin is subject to UK-REACH restrictions, UK-REACH annex XVII (entry 40).
styrene is subject to UK-REACH restrictions, UK-REACH annex XVII (entry 40).

methanol is subject to UK-REACH restrictions, UK-REACH annex XVII (entry 40).

Additional information

Tactile warning.

If this product is sold in retail, it must be delivered with child-resistant fastening.

Sources

The Management of Health and Safety at Work Regulations 1999.

The Health and Safety at Work etc. Act 1974 Regulations 2013.

Control of Major Accident Hazards (COMAH) Regulations 2015.

2012 No. 1715 ENVIRONMENTAL PROTECTION: The Volatile Organic Compounds in Paints, Varnishes and Vehicle Refinishing Products Regulations 2012.

Regulation (EU) No 1357/2014 of 18 December 2014 on waste as retained and amended in UK law.

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures (CLP) as retained and amended in UK law.

Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) as retained and amended in UK law.

15.2. Chemical safety assessment

No

SECTION 16: Other information

Full text of H-phrases as mentioned in section 3

H314, Corrosive to the respiratory tract.

H225, Highly flammable liquid and vapour.

H226, Flammable liquid and vapour.

H301, Toxic if swallowed.

H302, Harmful if swallowed.

H304, May be fatal if swallowed and enters airways.

H311, Toxic in contact with skin.

H314, Causes severe skin burns and eye damage.

H315, Causes skin irritation.

H317, May cause an allergic skin reaction.

H318, Causes serious eye damage.

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

H319, Causes serious eye irritation.
H331, Toxic if inhaled.
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.
H370, Causes damage to organs.
H371, May cause damage to organs.
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.

Abbreviations and acronyms

ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway
ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
CAS = Chemical Abstracts Service
CE = Conformité Européenne (European conformity)
CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
CSA = Chemical Safety Assessment
CSR = Chemical Safety Report
DMEL = Derived Minimal Effect Level
DNEL = Derived No Effect Level
EINECS = European Inventory of Existing Commercial chemical Substances
ES = Exposure Scenario
EUH statement = CLP-specific Hazard statement
EuPCS = European Product Categorisation System
EWC = European Waste Catalogue
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IARC = International Agency for Research on Cancer (IARC)
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
OECD = Organisation for Economic Co-operation and Development
PBT = Persistent, Bioaccumulative and Toxic
PNEC = Predicted No Effect Concentration
RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail
RRN = REACH Registration Number
SCL = A specific concentration limit
SVHC = Substances of Very High Concern
STOT-RE = Specific Target Organ Toxicity - Repeated Exposure
STOT-SE = Specific Target Organ Toxicity - Single Exposure
TWA = Time weighted average
UN = United Nations
UVBC = Unknown or variable composition, complex reaction products or of biological materials
VOC = Volatile Organic Compound
vPvB = Very Persistent and Very Bioaccumulative

Additional information

The classification of the substance/mixture in regard of health hazards are in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP) as retained and amended in UK law.
The classification of the substance/mixture in regard of environmental hazards are in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP) as retained and amended in UK law.
The classification of the mixture in regard to physical hazards has been based on experimental data.

▼ The safety data sheet is validated by

H.A.B.

Other

A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a blue

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

triangle.

The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products.

It is recommended to hand over this safety data sheet to the actual user of the product. Information in this safety data sheet cannot be used as a product specification.

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