

SAFETY DATA SHEET

RESION EP Colorshield Hardener

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

1.1. Product identifier

Trade name

RESION EP Colorshield Hardener

Product no.

EP212

Unique formula identifier (UFI)

4030-G0HH-J001-U44W

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

Relevant identified uses of the substance or mixture

Curing agent for resins

Use descriptors (REACH)

Sectors of use	Description
LCS "C"	Consumer uses: Private households (= general public = consumers)
LCS "IS"	Industrial uses: Uses of substances as such or in preparations at industrial sites
LCS "PW"	Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
SU 12	Manufacture of plastics products, including compounding and conversion
Product category	Description
PC 9a	Coatings and Paints, Fillers, Putties, Thinners
Process category	Description
PROC 10	Roller application or brushing
PROC 19	Hand-mixing with intimate contact and only PPE available
Environmental release category	Description
ERC 5	Industrial use resulting in inclusion into or onto a matrix
ERC 8c	Wide dispersive indoor use resulting in inclusion into or onto a matrix
ERC 8f	Wide dispersive outdoor use resulting in inclusion into or onto a matrix

Uses advised against

None known.

1.3. Details of the supplier of the safety data sheet

Company and address

Polyestershoppen BV

Oostbaan 680

2841 ML Moordrecht

Netherlands

+31 85 0220090

Contact person

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E-mail

info@polyestershoppen.nl

Revision

13/12/2023

SDS Version

2.0

Date of previous version

06/07/2023 (1.0)

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

Acute Tox. 4; H302, Harmful if swallowed.

Skin Corr. 1B; H314, Causes severe skin burns and eye damage.

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

Eye Dam. 1; H318, Causes serious eye damage.

Acute Tox. 4; H332, Harmful if inhaled.

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)

Harmful if swallowed or if inhaled. (H302+H332)

Causes severe skin burns and eye damage. (H314)

May cause an allergic skin reaction. (H317)

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)

Wear eye protection/protective gloves/protective clothing. (P280)

Response

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. (P303+P361+P353)

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing. (P305+P351+P338)

Storage

Store locked up. (P405)

▼ Disposal

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

Hazardous substances

benzyl alcohol

4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with

3-aminomethyl-3,5,5-trimethylcyclohexylamine

m-phenylenebis(methylamine)

2,4,6-tris(dimethylaminomethyl)phenol

Additional labelling

UFI: 4030-G0HH-J001-U44W

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
benzyl alcohol	CAS No.: 100-51-6 EC No.: 202-859-9 UK-REACH: Index No.: 603-057-00-5	40-60%	Acute Tox. 4, H302 Acute Tox. 4, H332	[9]
4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine	CAS No.: 38294-64-3 EC No.: 500-101-4 UK-REACH: Index No.:	40-60%	Skin Corr. 1B, H314 Skin Sens. 1, H317 Eye Dam. 1, H318 Aquatic Chronic 3, H412	
m-phenylenebis(methylamine)	CAS No.: 1477-55-0 EC No.: 216-032-5 UK-REACH: Index No.:	15-25%	Acute Tox. 4, H302 Skin Corr. 1B, H314 Skin Sens. 1, H317 Acute Tox. 4, H332 Aquatic Chronic 3, H412	
2,4,6-tris(dimethylaminomethyl)phenol	CAS No.: 90-72-2 EC No.: 202-013-9 UK-REACH: Index No.: 603-069-00-0	5-10%	Acute Tox. 4, H302 Skin Irrit. 2, H315 Skin Sens. 1B, H317 Eye Irrit. 2, H319	

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

▼ Other information

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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 injured person into fresh air. Make sure the injured person is continuously monitored. Prevent shock by keeping the injured person warm and calm. If breathing ceases, give mouth-to-mouth resuscitation. If unconscious, roll the injured person into recovery position. Call an ambulance.

▼ Skin contact

Flush exposed area with water for a long time - at least 30 minutes. It may be necessary to flush for several hours.

Use a comfortable water temperature (20-30 °C). Contact Poison Information/doctor/hospital for further advice on follow-up and treatment.

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

Remove contaminated clothing and shoes. Ensure to wash exposed skin thoroughly with water and soap. DO NOT use solvents or thinners.

If skin irritation occurs: Get medical advice/attention.

Eye contact

If in eyes: Flush eyes with plenty of water or salt water (20-30 °C) for at least 30 minutes and continue until irritation stops. Remove contact lenses. Make sure you flush under the upper and lower eyelids. Seek medical assistance immediately and continue flushing during transport.

Ingestion

In the case of ingestion, contact a doctor immediately. If the person is conscious, give them water. DO NOT try to induce vomiting unless this is recommended by a doctor. Hold head facing down to prevent vomit from returning to the mouth and throat. Prevent shock by keeping the injured person warm and calm. Initiate immediate resuscitation if breathing stops. If unconscious, roll the injured person into recovery position. Call an ambulance.

Burns

Not applicable.

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.

Tissue-damaging effects: This product contains substances with skin corrosive properties. Inhaled vapour or aerosols may produce adverse effects to lungs, irritations and burns in the respiratory organs as well as coughing. Dermal contact and contact with the eye cause irreversible effects.

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

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:

Nitrogen oxides (NO_x)

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

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

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

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

Because of the danger of self-ignition, any waste from the product, spray mist and soiled rags etc. are to be kept in a fire-proof place in air-tight containers, alternatively the waste is to be burned.

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 peroxides before distillation or evaporation and tested for peroxide formation or discarded after 1 year.

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.

Recommended storage material

Keep only in original packaging.

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

No substances are listed in the national list of substances with an occupational exposure limit.

DNEL

2,4,6-tris(dimethylaminomethyl)phenol

Duration:	Route of exposure:	DNEL:
Long term – Systemic effects - General population	Dermal	75 µg/kgbw/day
Long term – Systemic effects - Workers	Dermal	150 µg/kgbw/day
Short term – Systemic effects - General population	Dermal	75 µg/kgbw/day
Short term – Systemic effects - Workers	Dermal	600 µg/kgbw/day

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

Long term – Systemic effects - General population	Inhalation	130 µg/m ³
Long term – Systemic effects - Workers	Inhalation	530 µg/m ³
Short term – Systemic effects - General population	Inhalation	130 µg/m ³
Short term – Systemic effects - Workers	Inhalation	2.1 mg/m ³
Long term – Systemic effects - General population	Oral	75 µg/kgbw/day

4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine

Duration:	Route of exposure:	DNEL:
Long term – Systemic effects - General population	Dermal	50 µg/kgbw/day
Long term – Systemic effects - Workers	Dermal	140 µg/kgbw/day
Long term – Systemic effects - General population	Inhalation	74 µg/m ³
Long term – Systemic effects - Workers	Inhalation	493 µg/m ³
Long term – Systemic effects - General population	Oral	50 µg/kgbw/day

benzyl alcohol

Duration:	Route of exposure:	DNEL:
Long term – Systemic effects - Workers	Dermal	9.5 mg/kg
Short term – Systemic effects - Workers	Dermal	47 mg/kg
Long term – Systemic effects - General population	Oral	5 mg/kg
Short term – Systemic effects - General population	Oral	25 mg/kg

m-phenylenebis(methylamine)

Duration:	Route of exposure:	DNEL:
Long term – Systemic effects - Workers	Dermal	330 µg/kgbw/day
Long term – Local effects - Workers	Inhalation	200 µg/m ³
Long term – Systemic effects - Workers	Inhalation	1.2 mg/m ³

PNEC

2,4,6-tris(dimethylaminomethyl)phenol

Route of exposure:	Duration of Exposure:	PNEC:
Freshwater		46 µg/L
Freshwater sediment		262.1 µg/kg
Intermittent release (freshwater)		460 µg/L
Intermittent release (marine water)		46 µg/L
Marine water		4.6 µg/L
Marine water sediment		26.211 µg/kg
Sewage treatment plant		200 µg/L
Soil		25.4 µg/kg

4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine

Route of exposure:	Duration of Exposure:	PNEC:
Freshwater		11.1 µg/L
Freshwater sediment		4320 mg/kg
Intermittent release (freshwater)		111 µg/L
Marine water		1.11 µg/L
Marine water sediment		432 mg/kg

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

Predators		1 mg/kg
Sewage treatment plant		10 mg/L
Soil		864 mg/kg
benzyl alcohol		
Route of exposure:	Duration of Exposure:	PNEC:
Freshwater		1 mg/l
Freshwater sediment		5.27 mg/kg
Marine water		0.1 mg/l
Marine water sediment		0.527 mg/kg
Soil		0.456 mg/kg
m-phenylenebis(methylamine)		
Route of exposure:	Duration of Exposure:	PNEC:
Freshwater		94 µg/L
Freshwater sediment		12.4 mg/kg
Intermittent release (freshwater)		152 µg/L
Marine water		9.4 µg/L
Marine water sediment		1.24 mg/kg
Sewage treatment plant		10 mg/L
Soil		2.44 mg/kg

8.2. Exposure controls

Control is unnecessary if the product is used as intended.

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

Occupational exposure limits have not been defined for the substances in this product.

Appropriate technical measures

Ensure that eyewash stations and safety showers are located within easy reach.

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

Hygiene measures

In between use of the product and at the end of the working day all exposed areas of the body must be washed thoroughly. Always wash hands, forearms and face.

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

Work situation	Type	Class	Colour	Standards
In case of inadequate ventilation	A	Class 1 (low capacity)	Brown	EN14387



Skin protection

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

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

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Hand protection

Material	Glove thickness (mm)	Breakthrough time (min.)	Standards
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Nitrile

0,2

> 240

EN374-2, EN374-3, EN388



Eye protection

Type	Standards
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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

Pale yellow

Odour / Odour threshold

Characteristic

pH

9,5

Density (g/cm³)

1.038

Kinematic viscosity

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

Dynamic viscosity

3000 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)

205

Vapour pressure

0.1 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)

101

Flammability (°C)

435

Auto-ignition temperature (°C)

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

Lower and upper explosion limit (% v/v)

1.3 - 13

Solubility

Solubility in water

Very slightly soluble

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)

503,2

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

No data available.

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

None known.

10.5. Incompatible materials

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

10.6. ▼ Hazardous decomposition products

Thermal decomposition may produce corrosive vapours.

SECTION 11: Toxicological information

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

Acute toxicity

Product/substance	benzyl alcohol
Species:	Rat
Route of exposure:	Oral
Test:	LD50
Result:	1620 mg/kg

Product/substance	benzyl alcohol
Species:	Rat
Route of exposure:	Inhalation
Test:	LC50 (4 hours)
Result:	> 4178 mg/m ³

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

Product/substance	4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine
Species:	Rat
Route of exposure:	Oral
Test:	LD50
Result:	1030 mg/kgbw

Product/substance	4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine
Species:	Rat
Route of exposure:	Inhalation
Test:	LC50
Result:	>5,01 mg/L

Product/substance	4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine
Species:	Rat
Route of exposure:	Dermal
Test:	LD50
Result:	>2000 mg/kgbw

Product/substance	m-phenylenebis(methylamine)
Species:	Rat
Route of exposure:	Oral
Test:	LD50
Result:	930 mg/kg

Product/substance	m-phenylenebis(methylamine)
Species:	Rabbit
Route of exposure:	Dermal
Test:	LD50
Result:	>3100 mg/kg

Product/substance	m-phenylenebis(methylamine)
Species:	Rat
Route of exposure:	Inhalation
Test:	LC50 (4 hours)
Result:	1.34 mg/L

Harmful if swallowed.
Harmful if inhaled.

Skin corrosion/irritation

Product/substance	4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine
Species:	Rabbit
Result:	Adverse effect observed (Irritating)

Product/substance	m-phenylenebis(methylamine)
Result:	Adverse effect observed (Corrosive)

Causes severe skin burns and eye damage.

Serious eye damage/irritation

Product/substance	benzyl alcohol
Duration:	No data available.
Result:	Adverse effect observed (Irritating)

Product/substance	4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine
Result:	Adverse effect observed (Irritating)

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

Result: Adverse effect observed (Corrosive)

Causes serious eye damage.

Respiratory sensitisation

Product/substance 4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine

Result: Adverse effect observed (sensitising)

Skin sensitisation

May cause an allergic skin reaction.

Germ cell mutagenicity

Product/substance benzyl alcohol
 Test method: OECD 476
 Species: Bacteria
 Conclusion: Adverse effect observed

Product/substance benzyl alcohol
 Test method: OECD 474
 Species: Bacteria
 Conclusion: No adverse effect observed

Product/substance m-phenylenebis(methylamine)
 Conclusion: No adverse effect observed

Carcinogenicity

Product/substance m-phenylenebis(methylamine)
 Conclusion: No adverse effect observed

Reproductive toxicity

Product/substance benzyl alcohol
 Species: Mouse
 Result: Oral - Positive 750 mg/kg - Notes: 192h

Product/substance benzyl alcohol
 Species: Mouse
 Result: Oral - Negative 550 mg/kg - Notes: 240h

STOT-single exposure

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

STOT-repeated exposure

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

Aspiration hazard

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

11.2. Information on other hazards

Long term effects

Tissue-damaging effects: This product contains substances with skin corrosive properties. Inhaled vapour or aerosols may produce adverse effects to lungs, irritations and burns in the respiratory organs as well as coughing. Dermal contact and contact with the eye cause irreversible effects.

▼ Endocrine disrupting properties

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

Other information

None known.

SECTION 12: Ecological information

12.1. ▼ Toxicity

Product/substance benzyl alcohol

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

Species:	Daphnia
Duration:	48 hours
Test:	EC50
Result:	230 mg/L
Product/substance	benzyl alcohol
Species:	Algae
Duration:	72 hours
Result:	700 mg/L
Product/substance	benzyl alcohol
Species:	Fish
Duration:	96 hours
Test:	LC50
Result:	460 mg/L
Product/substance	benzyl alcohol
Species:	Bacteria
Duration:	24 hours
Test:	EC50
Result:	390 mg/L
Product/substance	4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine
Species:	Fish
Duration:	96 hours
Test:	LC50
Result:	110 mg/L
Product/substance	4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine
Species:	Daphnia
Duration:	48 hours
Test:	EC50
Result:	23 mg/L
Product/substance	4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine
Species:	Daphnia
Duration:	21 days
Test:	NOEC
Result:	3 mg/L
Product/substance	4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine
Species:	Algae
Duration:	72 hours
Test:	EC50
Result:	>50 mg/L
Product/substance	m-phenylenebis(methylamine)
Test method:	OECD 202
Species:	Daphnia
Duration:	48 hours
Test:	EC50
Result:	15.2 mg/L
Product/substance	m-phenylenebis(methylamine)
Test method:	OECD 201
Species:	Algae
Duration:	72 hours
Test:	EC50

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

Result: 20.3 mg/L

Product/substance: m-phenylenebis(methylamine)
 Test method: OECD 211
 Species: Daphnia
 Test: NOEC
 Result: 4.7 mg/L

Product/substance: m-phenylenebis(methylamine)
 Test method: OECD 201
 Species: Algae
 Duration: 72 hours
 Test: NOEC
 Result: 10.5 mg/L

Harmful to aquatic life with long lasting effects.

12.2. Persistence and degradability

Product/substance: benzyl alcohol
 Biodegradable: Yes

Product/substance: 4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine
 Biodegradable: No

12.3. ▼ Bioaccumulative potential

Product/substance: benzyl alcohol
 Potential bioaccumulation: Yes
 LogKow: No data available.
 BCF: 1.37

Product/substance: 4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine
 Potential bioaccumulation: Yes
 LogKow: No data available.
 BCF: .2

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.

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. (*)

HP 6 - Acute toxicity

HP 8 - Corrosive

HP 13 - Sensitising

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

20 01 27*




Paint, inks, adhesives and resins containing dangerous substances

Contaminated packing

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

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	UN2735	POLYAMINES, LIQUID, CORROSIVE, N.O.S. (benzyl alcohol, 4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine)	Transport hazard class: 8 Label: 8 Classification code: C7 	II	No	Limited quantities: 1 L Tunnel restriction code: (E) See below for additional information.
IMDG	UN2735	POLYAMINES, LIQUID, CORROSIVE, N.O.S. (benzyl alcohol, 4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine)	Transport hazard class: 8 Label: 8 Classification code: C7 	II	No	Limited quantities: 1 L EmS: F-A S-B See below for additional information.
IATA	UN2735	POLYAMINES, LIQUID, CORROSIVE, N.O.S. (benzyl alcohol, 4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine)	Transport hazard class: 8 Label: 8 Classification code: C7 	II	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 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

Not applicable.

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

▼ REACH, Annex XVII

RESION EP Colorshield Hardener is subject to UK-REACH restrictions, UK-REACH annex XVII (entry 3).

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.

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

H302, Harmful if swallowed.

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.

H412, Harmful to aquatic life with long lasting effects.

The full text of identified uses as mentioned in section 1

LCS "C" = Consumer uses: Private households (= general public = consumers)

LCS "IS" = Industrial uses: Uses of substances as such or in preparations at industrial sites

LCS "PW" = Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

SU 12 = Manufacture of plastics products, including compounding and conversion

PROC 10 = Roller application or brushing

PROC 19 = Hand-mixing with intimate contact and only PPE available

PC 9a = Coatings and Paints, Fillers, Putties, Thinners

ERC 5 = Industrial use resulting in inclusion into or onto a matrix

ERC 8c = Wide dispersive indoor use resulting in inclusion into or onto a matrix

ERC 8f = Wide dispersive outdoor use resulting in inclusion into or onto a matrix

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

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

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 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 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.

Country-language: GB-en