

TOPCOAT BR ROOFING DARK GREY RCFR 113-DG

Product Name:	Topcoat BR Roofing Dark Grey RCFR 113-DG 1570442 Rev. 1
Revision Date:	13-Jan-2025 According to Regulation (EC) No. 1907/2006

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

1.1. Product Identifier

Product Name: Topcoat BR Roofing Dark Grey RCFR 113-DG

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

Use of the substance/mixture: Fire-retardant topcoat recommended for use in flat roofing applications where regulations specify a fire-retardant system.

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

Leeds:	Newry:
Tel: +44 (0)113 270 3133 (office hours 9-5pm)	Tel: +44 (0)284 175 3738 (office hours 9-5pm)

UK: National Poisons Emergency Number: 0344 892 0111 (for healthcare professionals use only). NHS public service number NHS 111.

Ireland: Emergency medical information: 8am-10pm (7 days) contact National Poisons Information Centre, Beaumont Hospital, Dublin 9 DOV2NO, Ireland. 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

- Flammable, category 3
- Irritant, category 2
- Eye damage, category 2
- Organ toxicity single exposure, category 3
- Organ toxicity repeated exposure, category 1
- Chronic aquatic toxicity, category 3

2.2. Label elements



GHS02



GHS08



GHS07

Signal Word: Danger

2.2.1. Hazard Statements

H226 - Flammable liquid and vapour.

H361 - Suspected of damaging fertility or the unborn child.

H335 - May cause respiratory irritation.

H372 - Causes damage to organs through prolonged or repeated exposure.

H315 - Causes skin irritation.

H319 - Causes serious eye irritation.

EUH208 - Contains cobalt bis(2-ethylhexanoate). May produce an allergic reaction.

H412 - Harmful to aquatic life with long lasting effects.

2.2.2. Precautionary Statements

P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P403+P235 - Store in a well-ventilated place. Keep cool.

P260 - Do not breathe dust/fume/gas/mist/vapours/spray.

P403+P233 - Store in a well-ventilated place. Keep container tightly closed.

P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

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

P308+P313 - IF exposed or concerned: Get medical advice/attention.

P281 - Use personal protective equipment as required.

P370+P378 - In case of fire: use foam, carbon dioxide or dry agent to extinguish.

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

P201 – Obtain special instructions before use.

P273 – Avoid release to the environment.

P501 – Dispose of contents/container to an authorised waste collection point

P312 – Call a POISON CENTRE or doctor if you feel unwell.

P233 – Keep container tightly closed.

P314 – Get medical advice/attention if you feel unwell.

P264 – Wash hands thoroughly after handling.

P337+P313 – If eye irritation persists: Get medical advice/attention.

2.3. Other Hazards

Contains: Styrene

Solvent naphtha (petroleum), light arom.; Low boiling point naphtha – unspecified

3. Composition/Information on Ingredients

3.1. Substances

Not applicable

3.2. Mixtures

	CAS Number	EC Number	REACH Registration Number	Concentration	Symbols	H Statements
Styrene	100-42-5	202-851-5	01-2119457861-32-xxxx	< 35%	GHS02 GHS07 GHS08	H226 H332 H304 H315 H319 H361d H372 H412
Aluminium Hydroxide	21645-51-2	244-492-7	01-2119529246-39-XXXX	< 35%		
Methanol	67-56-1	200-659-6	01-2119433307-44-XXXX	< 1%	GHS02 GHS06	H225 H331

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					GHS08	H301 H311 H370
ethanediol; ethylene glycol	107-21-1	203-473-3	01-2119456816-28-XXXX	< 1%	GHS07 GHS08	H302;H373
Solvent naphtha (petroleum), light arom.; Low boiling point naphtha -unspecified	64742-95-6	265-199-0	01-2119486773-24-XXXX	< 1%	GHS02 GHS08 GHS09	EUH066 H226 H304 H340 H350 H411
Polyamine amide salt		935-868-8		< 1%	GHS07	H315
Naphtha (petroleum), heavy alkylate	64741-65-7	265-067-2	01-2120009436-62-XXXX	< 1%	GHS02 GHS07 GHS08 GHS09	EUH066 H226 H304 H315 H336 H411
Hydrocarbons, C9, aromatics	128601-23-0	918-668-5	01-2119455851-35-XXXX	< 1%	GHS02 GHS07 GHS08 GHS09	EUH066 H226 H304 H335 H336 H411
Paraffin waxes and Hydrocarbon waxes	8002-74-2	232-315-6	01-2119488076-30-XXXX	< 1%		
Organophilic phyllosilicates				< 1%		
N,N-DIMETHYL- 3-OXOBUTYRAMIDE	2044-64-6	218-059-8	01-2119963373-34-XXXX	< 1%		
cobalt bis(2-ethylhexanoate)	136-52-7	205-250-6	01-2119525678-29-XXXX	< 1%	GHS07 GHS08 GHS09	H317 H319 H360 H412 H400
Ethanol	64-17-5	200-578-6	01-2119457610-43-XXXX	< 1%	GHS02 GHS07	H225;H319
Silicon dioxide	112945-52-5	231-545-4	01-2119379499-16-XXXX	< 1%		
2,6-di-tert-butyl-p-cresol	128-37-0	204-881-4	01-2119565113-46-XXXX	< 0.1%	GHS09	H410;H400
maleic anhydride	108-31-6	203-571-6	01-2119472428-31-XXXX	< 0.1%	GHS05 GHS07 GHS08	EUH071 H302 H314 H317 H318 H334 H372
Neodecanoic acid, cobalt salt	27253-31-2	248-373-0	01-2119970733-31	< 0.1%	GHS07 GHS08	H302 H317 H372 H412
Cobalt Dihydroxide	21041-93-0	244-166-4	01-2119517583-39-XXXX	< 0.1%	GHS06 GHS07 GHS08 GHS09	H330 H302 H317 H319 H334 H350 H360 H410 H411
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics	64742-48-9	918-481-9	01-2119457273-39-XXXX	< 0.1%	GHS08	EUH066;H304

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Methoxy Propoxy Propanol	34590-94-8	252-104-2	01-2119450011-60-xxxx	< 0.1%		
HYDROQUINONE	123-31-9	204-617-8	01-2119524016-51-xxxx	< 0.1%	GHS05 GHS07 GHS08 GHS09	H302 H317 H318 H341 H351 H410 H400
2,2'-OXYBISETHANOL	111-46-6	203-872-2	01-2119457857-21-0155	< 0.1%	GHS07	H302
4-tert-butylpyrocatechol	98-29-3	202-653-9	01-2119548368-28-0006	< 0.1%	GHS05 GHS09 GHS07	H302 H312 H314 H317 H410 H400

	M factor	Specific Concentration Limits	Categories	M factor, acute	M factor, chronic
Styrene		*	Flam. Liq. 3 Acute Tox. 4 Skin Irrit. 2 Eye Irrit. 2 Repr. 2 STOT SE 3 STOT RE 1 Asp. Tox. 1 Aquatic Chronic 3		
Aluminium Hydroxide					
Methanol			Flam. Liq. 2 Acute Tox. 3 STOT SE 1		
ethanediol; ethylene glycol			Acute Tox. 4 STOT RE 2		
Solvent naphtha (petroleum), light arom.; Low boiling point naphtha -unspecified			Flam. Liq. 3 Muta. Cat. 1B Carc. 1B STOT SE 3 Asp. Tox. 1 Aquatic Chronic 2		
Polyamine amide salt			Skin Irrit. 2		
Naphtha (petroleum), heavy alkylate			Flam. Liq. 3 Skin Irrit. 2 STOT SE 3 Asp. Tox. 1 Aquatic Chronic 2		
Hydrocarbons, C9, aromatics			Flam. Liq. 3 STOT SE 3 Asp. Tox. 1 Aquatic Chronic 2		
Paraffin waxes and Hydrocarbon waxes					
Organophilic phyllosilicates					

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N,N-DIMETHYL-3-OXOBUTYRAMIDE					
cobalt bis(2-ethylhexanoate)	1;1		Eye Irrit. 2 Skin Sens. 1A Repr. 1 Cat. 1B Aquatic Acute 1 Aquatic Chronic 3	1	1
Ethanol			Flam. Liq. 2 Eye Irrit. 2		
Silicon dioxide					
2,6-di-tert-butyl-p-cresol	1;1		Aquatic Acute 1 Aquatic Chronic 1	1	1
maleic anhydride		Skin Sens. 1A H317: C ≥ 0,001 %	Acute Tox. 4 Skin Corr. 1B Eye Dam. 1 Resp. Sens. 1 Skin Sens. 1A STOT RE 1		
Neodecanoic acid, cobalt salt			Acute Tox. 4 Skin Sens. 1 STOT RE 1 Aquatic Chronic 3		
Cobalt Dihydroxide			Acute Tox. 1 Acute Tox. 4 Eye Irrit. 2 Resp. Sens. 1B Skin Sens. 1 Carc. 1B Repr. Cat. 1B Aquatic Acute 1 Aquatic Chronic 1		
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics			Asp. Tox. 1		
Methoxy Propoxy Propanol					
HYDROQUINONE	10;1		Acute Tox. 4 Eye Dam. 1 Skin Sens. 1 Muta. 2 Carc. 2 Aquatic Acute 1 Aquatic Chronic 1	10	1
2,2'-OXYBIETHANOL			Acute Tox. 4		
4-tert-butylpyrocatechol	1;1		Acute Tox. 4 Skin Corr. 1B Skin Sens. 1 Aquatic Acute 1 Aquatic Chronic 1	1	1

4. First Aid Measures

4.1. Description of First Aid Measures

In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible)

4.1.1. Inhalation

- Remove person to fresh air and keep comfortable for breathing. Seek immediate medical attention

4.1.2. Contact with skin

- After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of soap and water
- Contaminated clothing should be laundered before reuse When in doubt or symptoms persist, seek medical attention If skin irritation occurs: Get medical advice/attention.

4.1.3. Contact with eyes

- If substance has got into eyes, immediately wash out with plenty of water for at least 15 minutes
- Remove contact lenses, if present and easy to do. Continue rinsing. Seek immediate medical attention
- If eye irritation persists: Get medical advice/attention.

4.1.4. Ingestion

- Do NOT induce vomiting.
- Rinse mouth with water (do not swallow)
- Never give anything by mouth to an unconscious person Seek immediate medical attention

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

- Can cause damage to the eyes
- Can cause damage to the skin
- Can cause damage to the lungs

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

- Treat symptomatically

5. Firefighting Measures

5.1. Extinguishing media

- Do not use water jets
- In case of fire: use foam, carbon dioxide or dry agent to extinguish.

5.2. Special Hazards arising from substance or mixture

- Flammable and Toxic
- Vapours are heavier than air and may travel considerable distances to a source of ignition and flashback
- Vapours may ignite

5.3. Advice for Firefighters

- Wear Breathing Apparatus
- Keep container(s) exposed to fire cool, by spraying with water
- Prevent run off water from entering drains if possible

6. Accidental Release Measures

6.1. Personal precautions, protective equipment and emergency procedures

- Wear protective clothing as per section 8
- Evacuate the area and keep personnel upwind
- Shut off all ignition sources
- Shut off source of leak if safe to do so

6.2. Environmental Precautions

- Avoid release to the environment.
- Do not allow to enter public sewers and watercourses
- If contamination of drainage systems or water courses is unavoidable, immediately inform appropriate authorities

6.3. Methods and Material for Containment and Cleaning Up

- Dyke to prevent entry to sewer or waterway. Transfer liquid to a holding container
- Stop leak if safe to do so.
- Absorb spillage in inert material and shovel up
- Place in sealable container
- Use non-sparking tools.
- Ventilate the area and wash spill site after material pick-up is complete

6.4. Reference to other sections

- See Section 8
- See Section 13

7. Handling and Storage

7.1. Precautions for safe handling

- Wear protective clothing as per section 8
- Ensure adequate ventilation
- Handle and open container with care
- Take action to prevent static discharges.
- Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.
No smoking.
- Avoid breathing dust/fume/gas/mist/vapours/spray.
- Do not get in eyes, on skin, or on clothing.
- Avoid release to the environment.
- Do not eat, drink or smoke when using this product.
- Use explosion-proof equipment.
- Use non-sparking tools.
- Use good personal hygiene practices
- Forms hazardous decomposition products
- Dispose of contents/container to an authorised waste collection point

7.2. Conditions for safe storage, including any incompatibilities

- Keep container tightly closed
- Keep in a cool, dry, well ventilated place
- Opened containers should be carefully resealed and stored in an upright position
- Protect from light
- Protect from moist air
- Forms hazardous decomposition products
- Store in a well-ventilated place. Keep container tightly closed.
- Store in a well-ventilated place. Keep cool.
- Store locked up.

7.3. Specific end use(s)

- See Section 1.2

8. Exposure Controls/Personal Protection

8.1. Control Parameters

Substances

	DNEL (Consumer; inhalational , short term local effects)	DNEL (Consumer; oral, long term systemic effects)	DNEL (Consumer; dermal, long term systemic effects)	DNEL (Consumer; inhalational, short term systemic effects)	DNEL (Consumer; inhalational, long term systemic effects)	DNEL (Industry; inhalation al, short term local effects)
Styrene	182.7 mg/m ³	2.1 mg/kg/day	343 mg/kg/day	174.2 mg/m ³	10.2 mg/m ³	306 mg/m ³
Aluminium Hydroxide						
ethanediol; ethylene glycol			53 mg/kg bw/day			
Solvent naphtha (petroleum), light arom.; Low boiling point naphtha -unspecified		11 mg/kg	11 mg/kg		32 mg/m ³	
Hydrocarbons, C9, aromatics		11 mg/kg	11 mg/kg		32 mg/m ³	
Paraffin waxes and Hydrocarbon waxes						

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Organophilic phyllosilicates						
N,N-DIMETHYL-3-OXOBUTYRAMIDE		0.4167 mg/kg bw/day	0.4167 mg/kg bw/day		0.625 mg/m³	
cobalt bis(2-ethylhexanoate)					0.175 mg/m³	
Ethanol	950 mg/m³	87 mg/kg	206 mg/kg		114 mg/m³	1900 mg/m³
Silicon dioxide						
2,6-di-tert-butyl-p-cresol						
maleic anhydride						0.2 mg/m³
Neodecanoic acid, cobalt salt		0.032 mg/kg bw/day				
Cobalt Dihydroxide		13.6 mg/kg bw/day				
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics		125 mg/m³	125 mg/kg bw/day		185 mg/m³	
Methoxy Propoxy Propanol		36 mg/kg bw/day	121 mg/kg bw/day		37.2 mg/m³	
HYDROQUINONE		0.6 mg/kg bw/day	1.66 mg/kg bw/day		1.05 mg/m³	
2,2'-OXYBISETHANOL			21 mg/kg bw/day		12 mg/m³	
4-tert-butylpyrocatechol		0.117 mg/kg bw/day			0.365 mg/m³	

	DNEL (Industry; dermal, long term systemic effects)	DNEL (Industry; inhalational, short term systemic effects)	DNEL (Industry; inhalational, long term systemic effects)	WEL (long term)	WEL (short term)	WEL (inhalable dust)
Styrene	406 mg/kg/day	289 mg/m³	85 mg/m³	100 ppm ^ 430 mg/m³	250 ppm ^ 1080 mg/m³	
Aluminium Hydroxide						10 mg/m³
ethanediol; ethylene glycol	106 mg/kg/day			20 ppm ^ 52 mg/m³	40 ppm ^ 104 mg/m³	
Solvent naphtha (petroleum), light arom.; low boiling point naphtha - unspecified	25 mg/kg		150 mg/m³			
Hydrocarbons, C9, aromatics	25 mg/kg		150 mg/m³			
Paraffin waxes and Hydrocarbon waxes				2 mg/m³		
Organophilic phyllosilicates						10 mg/m³

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N,N-DIMETHYL-3-OXOBUTYRAMIDE	0.8333 mg/kg bw/day		2.9167 mg/m³			
cobalt bis(2-ethylhexanoate)				0.1 mg/m³		
Ethanol	343 mg/kg		950 mg/m³	1000 ppm ^ 1920 mg/m³		
Silicon dioxide						6.0 mg/m³
2,6-di-tert-butyl-p-cresol	0.5 mg/kg		3.5 mg/kg	10 mg/m³		
maleic anhydride		0.2 mg/m³	0.081 mg/m³	1 mg/m³	3 mg/m³	
Neodecanoic acid, cobalt salt				0.1 mg/m³		
Cobalt Dihydroxide				0.1 mg/m³		0.02 mg/m³
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics						
Methoxy Propoxy Propanol	283 mg/kg bw/day		308 mg/m³	50 ppm ^ 308 mg/m³		
HYDROQUINONE	3.33 mg/kg		2.1 mg/m³	0.5 mg/m³		
2,2'-OXYBISETHANOL	43 mg/kg bw/day		44 mg/m³			
4-tert-butylpyrocatechol			1.48 mg/m³			

	WEL (respirable dust)	DNEL (Consumer; inhalational, long term local effects)	DNEL (Industry; inhalational, long term local effects)	DNEL (oral)
Styrene				
Aluminium Hydroxide	4 mg/m³			
ethanediol; ethylene glycol		7 mg/m³	35 mg/m³	
Solvent naphtha (petroleum), light arom.; Low boiling point naphtha - unspecified				
Hydrocarbons, C9, aromatics				
Paraffin waxes and Hydrocarbon waxes				
Organophilic phyllosilicates	5 mg/m³			
N,N-DIMETHYL-3-OXOBUTYRAMIDE				
cobalt bis(2-ethylhexanoate)		0.037 mg/m³	0.2351 mg/m³	
Ethanol				
Silicon dioxide	2.4 mg/m³		4 mg/m³	

2,6-di-tert-butyl-p-cresol				
maleic anhydride			0.081 mg/m ³	
Neodecanoic acid, cobalt salt		0.043 mg/m ³	0.273 mg/m ³	
Cobalt Dihydroxide		0.0099 mg/m ³	0.0631 mg/m ³	13.6 mg/kg bw/day
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics				
Methoxy Propoxy Propanol				
HYDROQUINONE				
2,2'-OXYBIETHANOL		12 mg/m ³	60 mg/m ³	
4-tert-butylpyrocatechol				

8.2. Exposure Controls

- Wear suitable protective clothing, eye/face protection
- In case of insufficient ventilation, wear suitable respiratory equipment
- Wear suitable gloves: EN374
- Wear suitable protective footwear



Boots



Gloves



Goggles

8.3. Environmental exposure controls

- Avoid release to the environment.
- If contamination of drainage systems or water courses is unavoidable, immediately inform appropriate authorities

9. Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Physical state:

Liquid

Odour:	Smells of solvent
Odour threshold:	No information available
pH:	No information available
Melting point/Range:	No information available
Freezing point/Range:	No information available
Boiling Point/Range:	No information available
Flashpoint:	31°C
Evaporation Rate:	No information available
Flammability:	Flammable
Upper/lower flammability or explosive limits:	1.1 – 6.1 % (for styrene)
Vapour Pressure:	6.65 hPa (styrene vapours at 20°C)
Vapour Density:	No information available
Relative density:	No information available
Solubility in water:	Immiscible with water
Partition coefficient:	n-Octanol/water 2.82 – 2.95 (for styrene)
Autoignition Temperature:	(for styrene) 490°C
Decomposition temperature:	No information available
Viscosity:	11 – 13 Poise at 25 °C
Explosive Properties:	No information available
Oxidising Properties:	No information available

9.2. Other Information

- No information available

10. Stability and Reactivity

10.1. Reactivity

- No information available

10.2. Chemical stability

- This article is considered stable under normal conditions

10.3. Possibility of hazardous reactions

- No hazardous reactions known if used for its intended purpose

- Vapours may ignite

10.4. Conditions to avoid

- Keep away from heat
- Keep away from naked flames, incandescent or hot surfaces
- Keep away from static electricity
- Keep away from strong oxidizing substances

10.5. Incompatible materials

- Incompatible with acids and alkalis
- Incompatible with strong oxidizing substances

10.6. Hazardous decomposition Products

- May polymerise on exposure to heat and air
- Decomposition products may include toxic fumes

11. Toxicological Information

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

11.1.1. Acute toxicity

Estimated LD₅₀ (oral) (ATE) :	41404.44 mg/kg
Estimated LD₅₀ (dermal) (ATE) :	124213.3 mg/kg
Estimated LD₅₀ (inhalational) (ATE) :	34.83187 mg/l/4hr (gas/vapour)

Substances

	LC ₅₀ (inhalation, rat)	LD ₅₀ (oral, rat)	LD ₅₀ (skin, rat)	LD ₅₀ (dermal)	LD ₅₀ (dermal, rabbit)	LC ₅₀ (inhalation)
Styrene	11.8 mg/l	5000 mg/kg	> 2000 mg/kg			
Aluminium Hydroxide	> 2.3 mg/l	> 2000 mg/kg				

ethanediol; ethylene glycol	> 2.5 mg/l	7712 mg/kg		> 3500 mg/kg		
Solvent naphtha (petroleum), light arom.; Low boiling point naphtha -unspecified	> 5610 mg/m³	> 5000 mg/kg bw/day			> 6000 mg/kg	
Naphtha (petroleum), heavy alkylate	> 4951 mg/l	> 5000 mg/kg			> 5000 mg/kg	
Hydrocarbons, C9, aromatics		3492 mg/kg			> 3160 mg/kg	
Paraffin waxes and Hydrocarbon waxes		> 5000 mg/kg			> 2000 mg/kg	
N,N-DIMETHYL- 3-OXOBUTYRAMIDE		> 5000 mg/kg bw/day	> 2000 mg/kg bw/day			
cobalt bis(2-ethylhexanoate)		3129 mg/kg	> 5000 mg/kg			
Ethanol		> 2000 mg/kg			> 2000 mg/kg	> 20 mg/l
Silicon dioxide		> 5000 mg/kg			> 2000 mg/kg	
2,6-di-tert-butyl-p-cresol		> 6000 mg/kg	> 2000 mg/kg			
maleic anhydride		1090 mg/kg			2620 mg/kg	> 4.35 mg/l
Neodecanoic acid, cobalt salt		1098 mg/kg	> 5000 mg/kg			
Cobalt Dihydroxide	0.005 mg/l	1060 mg/kg	> 5000 mg/kg			
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics	> 6100 mg/m³	> 15000 mg/kg			> 3160 mg/kg bw/day	
Methoxy Propoxy Propanol	275 ppm	> 5000 mg/kg			9510 mg/kg	
HYDROQUINONE	> 7.8 mg/l	> 375 mg/kg			> 2000 mg/kg	
2,2'-OXYBISETHANOL	> 4.6 mg/l	19600 mg/kg bw/day			13330 mg/kg bw/day	
4-tert-butylpyrocatechol		815 mg/kg bw/day	1331 mg/kg bw/day			

11.1.2. Skin corrosion/irritation

No information available but must be considered harmful

11.1.3. Serious eye damage/irritation

No information available but must be considered harmful

11.1.4. Respiratory or skin sensitisation

No information available but must be considered harmful

11.1.5. Germ cell mutagenicity

No information available

11.1.6. Carcinogenicity

No information available

11.1.7. Reproductive toxicity

No information available but must be considered harmful

11.1.8. STOT (specific target organ toxicity) - single exposure

No information available but must be considered harmful

11.1.9. STOT (specific target organ toxicity) - repeated exposure

No information available but must be considered harmful

11.1.10. Aspiration hazard

No information available

11.2. Information on Other Hazards

No information available

12. Ecological Information

12.1. Toxicity

Substances

	EC ₅₀ (daphnia)	LC ₅₀ (fish)	PNEC (Fresh water)	PNEC (Marine water)	PNEC (Sediment; fresh water)	PNEC (Sediment; marine water)
Styrene	4.7 mg/l (48 hr)	4.02 mg/l (96 hr)	0.028 mg/l	0.0028 mg/l	0.614 mg/kg	0.0614 mg/kg
Methanol	10000 mg/l (48 hr)	10800 mg/l (96 hr)				
ethanediol; ethylene glycol	100 mg/l (48 hr)	752000 mg/l (96 hr)	10 mg/l	1 mg/l	20.9 mg/kg	20.9 mg/kg
Solvent naphtha (petroleum), light arom.; Low boiling point naphtha - unspecified	3.2 mg/l (48 hr)					
2,6-di-tert-butyl-p-cresol	0.48 mg/l (48 hr)	199 mg/l (96 hr)	0.000199 mg/l	0.00002 mg/l	0.0996 mg/kg	0.00996 mg/kg

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Polyamine amide salt	30 mg/l (48 hr)	48 mg/l (96 hr)				
maleic anhydride	42.81 mg/l (48 hr)	75 mg/l (96 hr)	0.038 mg/l	0.0038 mg/l	0.296 mg/kg	0.0296 mg/kg
Hydrocarbons, C9, aromatics		100 mg/l (96 hr)	0.1 mg/l		2.5 mg/kg	
Paraffin waxes and Hydrocarbon waxes	1000 mg/l (48 hr)	1000 mg/l (96 hr)				
Organophilic phyllosilicates	30000 mg/l (48 hr)					
N,N-DIMETHYL-3-OXOBUTYRAMIDE	1005 mg/l (48 hr)	977.74 mg/l (96 hr)	0.1227 mg/l	0.01227 mg/l	0.1434 mg/kg	0.0143 mg/kg

Substances

	PNEC (STP)	PNEC (intermittent)	PNEC (Soil)	IC₅₀ (algae)
Styrene	5 mg/l	0.04 mg/l	0.2 mg/kg	
Methanol				
ethanediol; ethylene glycol	199.5 mg/l	10 mg/l	1.53 mg/kg	
Solvent naphtha (petroleum), light arom.; Low boiling point naphtha -unspecified				
2,6-di-tert-butyl-p-cresol		0.00199 mg/l	0.04769 mg/l	
Polyamine amide salt				
maleic anhydride	44.6 mg/l	0.379 mg/l	0.037 mg/kg	
Hydrocarbons, C9, aromatics	1.6 mg/l		1.1 mg/kg	
Paraffin waxes and Hydrocarbon waxes				1000 mg/l (72 hr)
Organophilic phyllosilicates				
N,N-DIMETHYL-3-OXOBUTYRAMIDE	10 mg/l	1.227 mg/l	0.044 mg/kg	
Neodecanoic acid, cobalt salt	0.37 mg/l		10.9 mg/kg	
Cobalt Dihydroxide	0.37 mg/l		10.9 mg/kg	
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics				
cobalt bis(2-ethylhexanoate)	0.37 mg/l		10.9 mg/kg	
Methoxy Propoxy Propanol	4168 mg/l		2.74 mg/kg	
HYDROQUINONE	0.71 mg/l	0.00134 mg/l	0.00064 mg/kg	
Ethanol			0.63 mg/kg	

2,2'-OXYBISETHANOL	199.5 mg/l	10 mg/l	1.53 mg/kg	
4-tert-butylpyrocatechol	0.16 mg/kg	0.0012 mg/l	0.00068 mg/kg	
Silicon dioxide				

12.2. Persistence and degradability

No information available

12.3. Bioaccumulative potential

No information available

12.4. Mobility in soil

Immiscible in water

12.5. Results of PBT and vPvB

No information available

12.6. Endocrine disrupting properties

No information available

12.7. Other Adverse Effects

No information available

13. Disposal Considerations

13.1. Waste Treatment Methods

- Disposal should be in accordance with local, state or national legislation
- Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point
- Dispose of contents/container to an authorised waste collection point

14. Transport Information



Flammable Liquid

14.1. UN number or ID number

- UN No.: 1866

14.2. UN proper shipping name

- Proper Shipping Name: RESIN SOLUTION

14.3. Transport hazard class(es)

- Hazard Class: 3

14.4. Packing group

- Packing Group: III

14.5. Environmental hazards

- Not applicable

14.6. Special precautions for user

- ADR Classification Code: F1
- Tunnel Bulk Restriction Codes: B/C/D

14.7. Maritime transport in bulk according to IMO instruments

- No information available

15. Regulatory Information

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

- The ADR Regulations apply in the UK
- The CLP Regulations apply in the UK
- The COSHH Regulations apply in the UK
- The Health and Safety at Work Act applies in the UK
- The Hazardous Waste (England and Wales) Regulations 2005 apply in the UK

15.2. Chemical Safety Assessment

- A REACH chemical safety assessment has not been carried out

16. Other Information

Text not given with phrase codes where they are used elsewhere in this safety data sheet:- EUH066: Repeated exposure may cause skin dryness or cracking. EUH071: 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. H312: Harmful 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. H319: Causes serious eye irritation. H330: Fatal if inhaled. 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. H336: May cause drowsiness or dizziness. H340: May cause genetic defects. H341: Suspected of causing genetic defects. H350: May cause cancer. H351: Suspected of causing cancer. H360: May damage fertility or the unborn child. H361d: Suspected of damaging the unborn child. H370: Causes damage to organs. H372: Causes damage to organs through prolonged or repeated exposure. H373: May cause damage to organs through prolonged or repeated exposure. H400: Very toxic to aquatic life. H410: Very toxic to aquatic life with long lasting effects. H411: Toxic to aquatic life with long lasting effects. H412: Harmful to aquatic life with long lasting effects.

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