# SAFETY DATA SHEET ACCORDING TO REGULATION (EC) 1907/2006

# Product name: Cure It Topcoat

Creation date: 17.07.2019, Revision: 02.03.2023, version: 16.1

SECTION 1: IDENTIFICATION OF THE	SUBSTANCE/MIXTURE AND OF THE CO	MPANY/UNDERTAKING
1.1 Product identifier Product name Cure It Topcoat UFI: E500-W01J-R003-QVMC		https://my.chemius.net/p/doFHIx/en/pd/e4
1.2 Relevant identified uses of the subst	ance or mixture and uses advised against	
Relevant identified uses Topcoat for roofing. Contact the man	ufacturer for any other applications.	
Uses advised against No information.		
1.3 Details of the supplier of the safety of	data sheet	
Supplier	Manufacturer	
G&B Northwest Ltd	G&B Northwest Ltd	
Giants Hall Farm WN6 8RY Wigan, United Kingdom	Giants Hall Farm WN6 8RY Wigan, United Kingdom	
+44 (0)1942 518150	+44 (0)1942 518150	
technical@cureit.uk.com	enquiries@gandbnw.co.uk	
1.4 Emergency Telephone Number		
Emergency 112		
Supplier	am – 4.30pm	

# **SECTION 2: HAZARDS IDENTIFICATION**

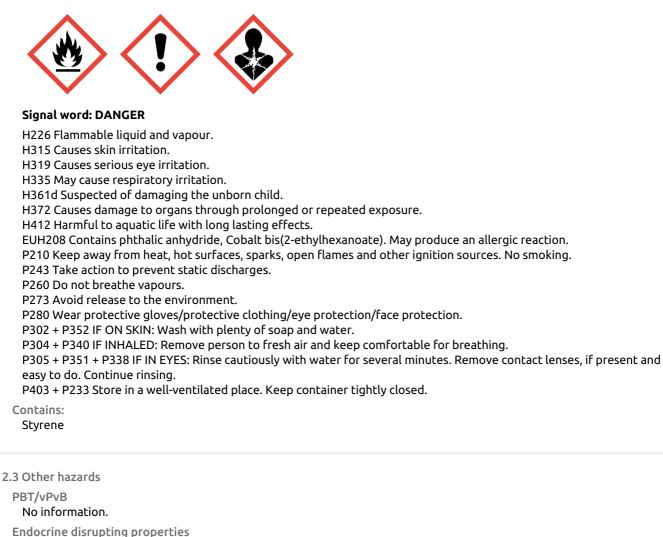
2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 (CLP) Flam. Liq. 3; H226 Flammable liquid and vapour. Skin Irrit. 2; H315 Causes skin irritation. Eye Irrit. 2; H319 Causes serious eye irritation. STOT SE 3; H335 May cause respiratory irritation. Repr. 2; H361d Suspected of damaging the unborn child. STOT RE 1; H372 Causes damage to organs through prolonged or repeated exposure. Aquatic Chronic 3; H412 Harmful to aquatic life with long lasting effects.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 [CLP]





No information.

Additional information No information.

# SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.1 Substances

For mixtures see 3.2.

## 3.2 Mixtures

Name	CAS EC Index Reach	%	Classification according to Regulation (EC) No 1272/2008 (CLP)	Specific Conc. Limits	Notes for substances
Styrene	100-42-5 202-851-5 601-026-00-0 01-2119457861-32	сса. 33	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; H361d STOT RE 1; H372 Aquatic Chronic 3; H412	/	/
titanium dioxide	13463-67-7 236-675-5 - 01-2119489379-17	cca. 11	/	/	/

talc	14807-96-6 238-877-9 -	cca. 10	/	/	/
amorphous silica	112945-52-5 601-216-3 -	cca. 3	/	/	/
xylene	1330-20-7 215-535-7 601-022-00-9 01-2119488216-32	< 10	Flam. Liq. 3; H226 Asp. Tox. 1; H304 Acute Tox. 4; H312 Skin Irrit. 2; H315 Eye Irrit. 2; H315 Acute Tox. 4; H332 STOT SE 3; H335 STOT RE 2; H373 Aquatic Chronic 3; H412	/	с
naphtha (petroleum), hydrodesulphurized heavy	64742-82-1 265-185-4 - 01-2119490979-12	< 1	Flam. Liq. 3; H226 Asp. Tox. 1; H304 STOT SE 3; H336 STOT RE 1; H372 Aquatic Chronic 2; H411	/	/
phthalic anhydride	85-44-9 201-607-5 607-009-00-4 01-2119457017-41	< 1	Acute Tox. 4; H302 Skin Irrit. 2; H315 Skin Sens. 1; H317 Eye Dam. 1; H318 Resp. Sens. 1; H334 STOT SE 3; H335	/	/
Cobalt bis(2- ethylhexanoate)	136-52-7 205-250-6 - 01-2119524678-29	< 0,25	Flam. Liq. 3; H226 Acute Tox. 4; H302 Skin Sens. 1; H317 Resp. Sens. 1; H334 STOT SE 3; H336	/	/

## Notes for substances

с	Some organic substances may be marketed either in a specific isomeric form or as a mixture of several isomers. In this case the supplier must state on the label whether the substance is a
	specific isomer or a mixture of isomers.
	5

# **SECTION 4: FIRST AID MEASURES**

## 4.1 Description of first aid measures

#### **General notes**

Never give anything by mouth to an unconscious person. Place patient in recovery position and ensure airway patency. When in doubt or if feeling unwell seek medical assistance. Show the safety data sheet and label to the physician. No action shall be taken involving any personal risk or without suitable training. When it is suspected, that there may still be harmful vapours/fumes present in the air, respiratory protection (mask; self contained breathing apparatus) must be used. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Use personal protective equipment. See section 8 for more information.

## Following inhalation

Remove patient to fresh air - move out of dangerous area. In case of unconsciousness bring patient into stable side position and seek medical attention. Seek medical help immediately. If breathing is irregular or respiratory arrest occurs provide artificial respiration. Keep at rest in a position comfortable for breathing.

## Following skin contact

Wash affected skin areas thoroughly with plenty of water and soap. Take off all contaminated clothing. If symptoms develop and persist, seek medical attention.

## Following eye contact

Immediately flush eyes with running water, keeping eyelids apart. If irritation persists, seek professional medical attention.

**Following ingestion** 

Do not induce vomiting! Rinse mouth thoroughly with water. Never give anything by mouth to an unconscious person. Immediately consult a doctor. Show the physician the safety data sheet or label.

4.2 Most important symptoms and effects, both acute and delayed

Following inhalation

Can cause irritation of respiratory system. Coughing, sneezing, nasal discharge, labored breathing. May cause allergic respiratory reaction. Long-term inhalation may cause severe damage to the health.

#### Following skin contact

Irritating to the skin. Itching, redness, pain. May cause sensitisation by skin contact (symptoms: itching, redness, rashes).

#### Following eye contact

Causes severe eye irritation. Redness, tearing, pain.

#### Following ingestion

May cause abdominal discomfort. May cause nausea/vomiting and diarrhea. Irritates mucous membranes in the mouth, throat, esophagus and in gastrointestinal area.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

# **SECTION 5: FIREFIGHTING MEASURES**

## 5.1 Extinguishing media

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Alcohol-resistant foam.

Foam.

Carbon dioxide (CO<sub>2</sub>).

#### Unsuitable extinguishing media

Full water jet. Do not use water jet as an extinguisher, as this will spread the fire.

## 5.2 Special hazards arising from the substance or mixture

#### Hazardous combustion products

In case of a fire toxic gases can be generated; do not inhale gases/smoke. Vapours and air can form explosive mixtures. The vapor/gas is heavier than air and will spread along the ground. In the event of fire the following can be generated: carbon monoxide (CO), carbon dioxide (CO<sub>2</sub>).

#### 5.3 Advice for firefighters

#### **Protective actions**

Prolonged heating can cause an explosion. Vapours can form explosive mixtures with air. In case of fire or heating do not breathe fumes/vapours. Cool containers at risk with water spray. If possible remove containers from endangered area. No action shall be taken involving any personal risk or without suitable training.

## Special protective equipment for fire-fighters

Firefighters should wear appropriate protective clothing for firefighters (including helmets, protective boots and gloves) (EN 469) and self-contained breathing apparatus (SCBA) with a full face-piece (EN 137).

## Additional information

Contaminated firefighting water and fire residues must be disposed of in accordance with the local regulations.

## **SECTION 6: ACCIDENTAL RELEASE MEASURES**

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Protective equipment

Use personal protective equipment (Section 8).

Precautionary measures

Ensure adequate ventilation. Keep away from sources of ignition and/or heat; No smoking! Take precautionary measures against static discharges.

**Emergency procedures** 

Prevent access to unprotected personnel. No action shall be taken involving any personal risk or without suitable training. Evacuate the danger zone. Do not breathe vapour or mist. Avoid contact with skin, eyes and clothing.

For emergency responders

During intervention, use personal protective equipment (Section 8).

6.2 Environmental precautions

Do not allow product to reach water/drains/sewage systems or permeable soil. In case of release into the environment, inform the relevant authorities.

6.3 Methods and material for containment and cleaning up

For containment

Stem the spill if this does not pose risks.

For cleaning up

Absorb product (with inert material), collect it in special container and dispose it to a licensed hazardous-waste disposal contractor. Clean contaminated area with plenty of water. Use spark-proof tools. Ventilate the premises. Use only explosion-proof instruments and equipment. Prevent release into the sewer, water, basements or confined areas.

OTHER INFORMATION No information.

6.4 Reference to other sections

See also sections 8 and 13.

# **SECTION 7: HANDLING AND STORAGE**

#### 7.1 Precautions for safe handling

Protective measures

Measures to prevent fire

Ensure adequate ventilation. Take precautionary measures against static discharges. Keep away from sources of ignition - no smoking. Use spark-proof tools. Vapours are heavier than air and spread along the floor. They form explosive mixtures with air. In order to avoid the risk of fires and explosions, never use compressed air when handling. Empty containers may contain flammable product residues. Do not weld, solder, drill, cut.

Measures to prevent aerosol and dust generation

Use general or local exhaust ventilation to prevent inhaling vapours and aerosols.

Measures to protect the environment

Do not discharge into drains, surface water and soil. After use immediately close container tightly.

Other measures No information.

Advice on general occupational hygiene

Do not eat, drink or smoke while working. Do not breathe vapours/mist. Use good personal hygiene practices – wash hands at breaks and when done working with material. Avoid contact with skin, eyes and clothes. Remove contaminated clothes and wash them before reuse. Wear suitable protective equipment; see Section 8. In case of insufficient ventilation, wear suitable respiratory protection equipment.

7.2 Conditions for safe storage, including any incompatibilities

# Technical measures and storage conditions

Protect from open fire, heat and direct sunlight. Keep away from food, drink and animal feeding stuffs. Keep away from sources of ignition - no smoking. Keep in a cool, dry and well ventilated place. Store below 30°C. Keep away from strong oxidising agents. Keep away from peroxides. Keep away from reducing agents.

## **Packaging materials**

Store only in original container. Metallic GRP containers.

## Requirements for storage rooms and vessels

Close opened containers after use. Put the containers upright to prevent from leaking. Do not store in unlabelled containers.

Storage class No information.

Further information on storage conditions No information.

7.3 Specific end use(s)

Recommendations See identified uses in Section 1.2.

Industrial sector specific solutions

No information.

# **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

## 8.1 Control parameters

Occupational Exposure limit values

Name	mg/m <sup>3</sup>	ml/m <sup>3</sup>	Short-term value mg/m <sup>3</sup>	Short-term value ml/m <sup>3</sup>	Remark	Biological Tolerance Values
Styrene	215	50	425	100	India; source: Ministry of Labour and Employment, Permissible Levels of Certain Chemical substances in work environment	/
titanium dioxide	10	/	/	/	TWA 8h (inhalable fraction); EH40/2005 (UK)	/
titanium dioxide	4	/	/	/	TWA 8h (respiratory fraction); EH40/2005 (UK)	/
xylene	435	100	655	150	India; source: Ministry of Labour and Employment, Permissible Levels of Certain Chemical substances in work environment	/
Styrene (100-42-5)	430	100	1080	250	/	/
Xylene, o-,m-,p- or mixed isomers (1330-20-7)	220	50	441	100	Sk, BMGV	650 mmol methyl hippuric acid/mol creatinine in urine - Post shift 650 mmol methyl hippuric acid/mol creatinine in urine - Post shift 650 mmol methyl hippuric acid/mol creatinine in urine - Post shift
Phthalic anhydride (85-44-9)	4	/	12	/	Sen	/
Talc, respirable dust (14807-96-6)	1	/	/	/	/	/

Titanium dioxide respirable (13463- 67-7)	4	/	/	/	/	/
Titanium dioxide total inhalable (13463-67-7)	10	/	/	/	/	/

Information on monitoring procedures

BS EN 14042:2003 Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents. BS EN 689:2018 Workplace exposure. Measurement of exposure by inhalation to chemical agents. Strategy for testing compliance with occupational exposure limit values. BS EN 482:2021 Workplace exposure. Procedures for the determination of the concentration of chemical agents. Basic performance requirements.

# DNEL/DMEL values

### For product

# No information.

Name	Туре	Exposure route	exp. frequency	Remark	value
Styrene	Worker	inhalation	long term systemic effects	/	85 mg/m³
Styrene	Worker	inhalation short term systemic effects		/	289 mg/m³
Styrene	Worker	inhalation	short term local effects	/	306 mg/m³
Styrene	Worker	dermal	long term systemic effects	/	406 mg/kg bw/day
Styrene	Consumer	inhalation	long term systemic effects	/	10.2 mg/m <sup>3</sup>
Styrene	Consumer	inhalation	short term systemic effects	/	174.25 mg/m³
Styrene	Consumer	inhalation	short term local effects	/	182.75 mg/m³
Styrene	Consumer	dermal	long term systemic effects	/	343 mg/kg bw/day
Styrene	Consumer	oral	long term systemic effects	/	2.1 mg/kg bw/day
titanium dioxide	Worker	inhalation	long term local effects	/	10 mg/m³
titanium dioxide	Consumer	oral	long term systemic effects	/	700 mg/kg bw/day
amorphous silica	Worker	inhalation	long term systemic effects	/	4 mg/m <sup>3</sup>
xylene	Worker	inhalation	long term systemic effects	/	77 mg/m³
xylene	Worker	inhalation	short term systemic effects	/	289 mg/m³
xylene	Worker	inhalation	short term local effects	/	289 mg/m³
xylene	Worker	dermal	long term systemic effects	/	180 mg/kg bw/day
xylene	Consumer	inhalation	long term systemic effects	/	14.8 mg/m <sup>3</sup>
xylene	Consumer	inhalation	short term systemic effects	/	174 mg/m³
xylene	Consumer	inhalation	short term local effects	/	174 mg/m³
xylene	Consumer	dermal	long term systemic effects	/	108 mg/kg bw/day
xylene	Consumer	oral	long term systemic effects	/	1.6 mg/kg bw/day
naphtha (petroleum), hydrodesulphurized heavy	Worker	inhalation	long term systemic effects	/	330 mg/m³
naphtha (petroleum), hydrodesulphurized heavy	Worker	dermal	long term systemic effects	/	44 mg/kg bw/day

naphtha (petroleum), hydrodesulphurized heavy	Consumer	inhalation	long term systemic effects	/	71 mg/m³
naphtha (petroleum), hydrodesulphurized heavy	Consumer	dermal	long term systemic effects	/	26 mg/kg bw/day
naphtha (petroleum), hydrodesulphurized heavy	Consumer	oral	long term systemic effects	/	26 mg/kg bw/day
phthalic anhydride	Consumer	oral	long term systemic effects	/	5 mg/kg bw/day
phthalic anhydride	Worker	oral	long term systemic effects	/	10 mg/kg bw/day
phthalic anhydride	Consumer	dermal	long term systemic effects	/	5 mg/kg bw/day
phthalic anhydride	Worker	dermal	long term systemic effects	/	10 mg/kg bw/day
phthalic anhydride	Consumer	inhalation	long term systemic effects	/	8.6 mg/m³
phthalic anhydride	Worker	inhalation	long term systemic effects	/	32.2 mg/m³
Cobalt bis(2- ethylhexanoate)	Worker	inhalation	long term local effects	/	235.1 µg/m3
Cobalt bis(2- ethylhexanoate)	Consumer	inhalation	long term local effects	/	37 µg/m3
Cobalt bis(2- ethylhexanoate)	Consumer	oral	long term systemic effects	/	55.8 µg/kg

# **PNEC** values

# For product

No information.

Name	Exposure route	Remark	value
Styrene	fresh water	/	0.028 mg/L
Styrene	marine water	/	0.0028 mg/L
Styrene	water treatment plant	microorganisms	5 mg/L
Styrene	fresh water sediment	dry weight	0.614 mg/kg
Styrene	marine water sediment	dry weight	0.0614 mg/kg
Styrene	soil	dry weight	0.2 mg/kg
Styrene	water, intermittent release	fresh water	0.04 mg/L
titanium dioxide	fresh water	/	0.127 mg/L
titanium dioxide	marine water	/	1 mg/L
titanium dioxide	water, intermittent release	/	0.61 mg/L
titanium dioxide	fresh water sediment	/	1000 mg / kg sediment dw
titanium dioxide	marine water sediment	/	100 mg / kg sediment dw
titanium dioxide	soil	/	100 mg/kg soil dw
amorphous silica	food chain	oral	60000 mg/kg
xylene	fresh water	/	0.327 mg/L
xylene	soil	dry weight	2.31 mg/kg
xylene	water, intermittent release	fresh water	0.327 mg/L
xylene	marine water	/	0.327 mg/L
xylene	water treatment plant	/	6.58 mg/L
xylene	fresh water sediment	dry weight	12.46 mg/kg
xylene	marine water sediment	dry weight	12.46 mg/kg
naphtha (petroleum), hydrodesulphurized heavy	soil	dry weight	0.4 mg/kg
phthalic anhydride	soil	1	0.173 mg/kg

phthalic anhydride	water treatment plant	/	10 mg/L
phthalic anhydride	fresh water sediment	/	3.8 mg/kg
phthalic anhydride	marine water sediment	/	0.38 mg/kg dwt
phthalic anhydride	marine water	/	0.1 mg/L
phthalic anhydride	fresh water	/	1 mg/L
phthalic anhydride	water, intermittent release	/	5.6 mg/L
Cobalt bis(2-ethylhexanoate)	fresh water	/	0.6 µg Co/L
Cobalt bis(2-ethylhexanoate)	marine water	/	2.36 µg Co/L
Cobalt bis(2-ethylhexanoate)	fresh water sediment	/	9.5 mg Co/kg
Cobalt bis(2-ethylhexanoate)	marine water sediment	/	9.5 mg Co/kg
Cobalt bis(2-ethylhexanoate)	soil	/	10.9 mg Co/kg
Cobalt bis(2-ethylhexanoate)	water treatment plant	/	0.37 µg Co/L

#### 8.2 Exposure controls

Appropriate engineering control

Substance/mixture related measures to prevent exposure during identified uses

Do not breathe vapours/aerosols. Use good personal hygiene practices – wash hands at breaks and when done working with material. Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke while working. Avoid contact with skin, eyes and clothes.

Structural measures to prevent exposure

No information.

Organisational measures to prevent exposure

Remove all contaminated clothes immediately and wash them before reuse.

Technical measures to prevent exposure

Provide good ventilation and local exhaust in areas with increased concentration. Keep away from food, drink and animal feeding stuffs. The use of adequate technical equipment must always take priority over personal protective equipment.

Personal protective equipment

Eye and face protection

Safety glasses with side protection (EN 166). Do not use contact lenses.

Hand protection

Protective gloves (EN 374). The penetration time is determined by the protective glove manufacturer and must be observed. Observe the manufacturer's instructions regarding the use, storage, maintenance and replacement of gloves. In case of damage or at the first signs of wear and tear, change the gloves immediately. The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

Appropriate materials

Material	Thickness	Penetration Time	Remark
Neoprene	/	/	EN 374
Nitrile	/	/	EN 374
Viton (fluorinated rubber)	/	/	EN 374
PVA	/	/	EN 374

#### Skin protection

At high risk of skin exposure chemical suits (EN ISO 6530:2005) and boots may be required (EN ISO 20345:2012). Protective antistatic clothing EN 1149 (1:2006, 2:1998 and 3:2004, 5:2008), protective antistatic shoes (EN 20345:2012). Clothing for protection against chemical risks, with antistatic and fireproof properties.

Respiratory protection

In case of insufficient ventilation wear suitable respiratory protection. Wear suitable protective breathing mask (EN 136) with filter A2-P2 (EN 14387). For dust/gas/ vapor concentrations above the applicable filter limit, in case of oxygen concentrations below 17% or in vague conditions, autonomous self-contained breathing apparatus should be used, according to standard EN 137, EN 138.

Thermal hazards

No information.

Environmental exposure controls

Substance/mixture related measures to prevent exposure No information.

Instruction measures to prevent exposure No information.

Organisational measures to prevent exposure No information.

Technical measures to prevent exposure

Do not allow product to reach drains, sewage systems or ground water.

# SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical state

liquid

Colour

дгеу

Odour styren like

Important health, safety and environmental information

Odour threshold	No information.
Melting point/Freezing point	No information.
Boiling point or initial boiling point and boiling range	No information.
Flammability	No information.
Lower and upper explosion limit	No information.
Flash point	31°C
Auto-ignition temperature	490 °C
Decomposition temperature	No information.
рН	No information.
Viscosity	kinematic: 9091 — 27273 at 20 °C Dynamic: 10000 — 30000 mPas at 20 °C
Solubility	Water: Insoluble Organic solvent: Partially soluble
Partition coefficient	No information.
Vapour pressure	6 hPa at 20 °C
Density and/or relative density	Density: 1.1 — 1.4 g/cm <sup>3</sup> at 20 °C
Relative vapour density	3.6
Particle characteristics	No information.

# 9.2 OTHER INFORMATION

No information.

Explosive properties
Other information

Flammability Limits in Air: Upper 6.1 – 6.8%; Lower 0.9 – 1.1%. Soluble in most organic solvents.

# SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

Temperature above flashpoint: higher fire/explosion hazard.

# 10.2 Chemical stability

Product is stable under normal conditions of use, recommended handling and storage conditions.

## 10.3 Possibility of hazardous reactions

Vapours and air can form flammable or explosive mixtures. The risk of polymerization.

## 10.4 Conditions to avoid

Protect from heat, direct sunlight, open fire, sparks. Extremes of temperature and direct sunlight. Take precautionary measures against static discharges.

10.5 Incompatible materials

Strong oxidising agents. Peroxide. Reducing agents.

# 10.6 Hazardous decomposition products

Under normal use conditions no hazardous decomposition products are expected. In case of fire/explosion vapours/gases that pose a health hazard are released. Carbon dioxide; Carbon monoxide.

# **SECTION 11: TOXICOLOGICAL INFORMATION**

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

#### (a) Acute toxicity

#### For components

Name	Exposure route	Туре	Species	Time	value	Method	Remark
Styrene	oral	LD <sub>50</sub>	rat	/	5000 mg/kg	/	/
Styrene	dermal	LD <sub>50</sub>	rat	24 h	> 2000 mg/kg bw	OECD 402	/
Styrene	inhalation	LC <sub>50</sub>	rat	4 h	11.8 mg/l	/	/
titanium dioxide	oral	LD <sub>50</sub>	rat	/	> 5000 mg/kg	OECD 425	/
titanium dioxide	dermal	LD <sub>50</sub>	rabbit	/	> 10000 mg/kg	/	/
titanium dioxide	inhalation	LC <sub>50</sub>	rat	4 h	> 6.82 mg/l	/	/
amorphous silica	dermal	LD <sub>50</sub>	rabbit	/	> 5000 mg/kg	/	/
amorphous silica	inhalation	LC <sub>50</sub>	rat	4 h	> 0.14 mg/l	OECD 403 OECD 403	/
xylene	oral	LD <sub>50</sub>	rat	/	> 4000 mg/kg bw	EU B.1 EU B.1	/
xylene	dermal	LD <sub>50</sub>	rabbit	/	> 5000 mg/kg bw	/	/
xylene	inhalation	LC <sub>50</sub>	rat	4 h	29091 mg/m <sup>3</sup>	EU B.2 EU B.2	/
phthalic anhydride	oral	LD <sub>50</sub>	rat	/	1530 mg/kg bw	/	/
phthalic anhydride	dermal	LD <sub>50</sub>	rabbit	/	> 3160 mg/kg bw	/	/
phthalic anhydride	inhalation	LC <sub>50</sub>	rat	4 h	> 2.14 mg/l	/	/
Cobalt bis(2- ethylhexanoate)	oral	LD <sub>50</sub>	rat	/	3129 mg/kg	OECD 425	/

## (b) Skin corrosion/irritation

Name	Species	Time	result	Method	Remark
Styrene	rabbit	/	Irritating.	/	/

titanium dioxide	rabbit	/	Non-irritant.	OECD 404	/
amorphous silica	rabbit	/	Non-irritant.	OECD 404	/
xylene	rabbit	/	Mild irritating.	EU B.4	/
phthalic anhydride	rabbit	/	Irritating.	OECD 404	/
Cobalt bis(2- ethylhexanoate)	/	/	Non corrosive.	OECD 431	/

## Additional information Causes skin irritation.

# (c) Serious eye damage/irritation

For components

Name	Exposure route	Species	Time	result	Method	Remark
Styrene	/	rabbit	/	Irritating.	/	/
titanium dioxide	/	rabbit	/	No irritant effect.	OECD 405	/
amorphous silica	/	rabbit	/	No irritant effect.	OECD 405	/
xylene	/	rabbit	/	Mild irritating.	/	/
phthalic anhydride	/	rabbit	/	Irritating to eyes.	Draize test	/
Cobalt bis(2- ethylhexanoate)	/	/	/	moderately irritating	OECD 437, EU B.47	/
Cobalt bis(2- ethylhexanoate)	/	rabbit	/	Irritating.	OECD 405	/

# Additional information

# Causes serious eye damage.

(d) Respiratory or skin sensitisation

# For components

Name	Exposure route	Species	Time	result	Method	Remark
Styrene	-	/	/	Non sensitising.	/	/
titanium dioxide	dermal	mouse (female)	/	Non sensitising.	OECD 429	experimental value
titanium dioxide	dermal	guinea pig	/	Non sensitising.	OECD 406	/
amorphous silica	dermal	/	/	Non sensitising.	/	/
amorphous silica	inhalation	/	/	Non sensitising.	/	/
xylene	dermal	mouse	/	Non sensitising.	OECD 429	experimental value
phthalic anhydride	dermal	guinea pig	/	Sensitizing.	OECD 406	/
phthalic anhydride	inhalation	guinea pig	/	Sensitizing.	/	/
Cobalt bis(2- ethylhexanoate)	dermal	/	/	May cause sensitisation by skin contact.	/	/

# (e) (Germ cell) mutagenicity

Name	Туре	Species	Time	result	Method	Remark
Styrene	in-vitro mutagenicity	Bacteria	/	Ambiguous.	OECD 471	S.typhimurium G46,TA1530, TA1535, TA100, TA98, TA1538, TA1537
Styrene	in-vitro mutagenicity	Cell: Mammalian- Animal	/	Equivocal	OECD 476	Hamster
Styrene	in-vitro mutagenicity	/	/	Positive.	OECD 473, 479	Chromosome aberration assay
Styrene	in-vivo mutagenicity	mouse	/	Negative.	OECD 474, 486	/
titanium dioxide	in-vitro mutagenicity	/	/	Negative.	OECD 471 (Bacterial Reverse Mutation Test)	Ames test
titanium dioxide	in-vitro mutagenicity	mouse	/	Negative.	OECD 476	experimental value
titanium dioxide	in-vitro mutagenicity	Chinese hamster ovary	/	Negative.	OECD 473	Chromosome aberration assay

titanium dioxide	in-vivo mutagenicity	mouse	/	Negative.	/	/
amorphous silica	in-vitro mutagenicity	/	/	Negative.	OECD 471 (Bacterial Reverse Mutation Test)	Ames test
amorphous silica	in-vitro mutagenicity	Cell: Mammalian- Animal	/	Negative.	OECD 476	/
amorphous silica	in-vitro mutagenicity	/	/	Negative.	OECD 473	Chromosome aberration assay
amorphous silica	in-vivo mutagenicity	rat	/	Negative.	/	/
xylene	in-vitro mutagenicity	Chinese hamster ovary	/	Negative.	EU Method B.10	Chromosome aberration assay
xylene	in-vitro mutagenicity	Cell: Mammalian- Animal	/	Negative.	EU B.19	Hamster
xylene	in-vivo mutagenicity	mouse	/	Negative.	OECD 478	/
phthalic anhydride	in-vitro mutagenicity	S.typhimurium TA 1535, TA 1537, TA 98, TA 100 and TA102; Escherichia coli WP2 uvrA	/	Negative.	OECD 471	/
phthalic anhydride	in-vitro mutagenicity	Cell: Mammalian- Animal	/	Negative.	OECD 476	Hamster
phthalic anhydride	in-vitro mutagenicity	hamster	/	Equivocal	OECD 473	Chromosome aberration assay
Cobalt bis(2- ethylhexanoate)	in-vivo mutagenicity	/	/	Negative.	OECD 474	/
Cobalt bis(2- ethylhexanoate)	in-vivo mutagenicity	/	/	Negative.	OECD 475	/

# (f) Carcinogenicity

For components

Name	Exposure route	Туре	Species	Time	value	result	Method	Remark
Styrene	inhalation	NOAEC	rat	/	≥ 4.34 mg/m <sup>3</sup> air	negative	OECD 453	/
Styrene	inhalation (vapours)	LOAEC	mouse (male/female)	/	0.09 - 0.18 mg/l	Positive	OECD 453	/
Styrene	oral	NOAEL	rat	/	≥ 2000 mg/kg bw/day	positive	/	/
Styrene	oral	LOAEL	mouse	/	150 mg/kg bw/day	Positive	/	/
titanium dioxide	inhalation	NOAEC	rat	/	5 mg/m <sup>3</sup> air	negative	OECD 453	lung tumours
titanium dioxide	oral	NOEL	rat	/	> 50000 ppm	negative	/	/
amorphous silica	oral	NOAEL	rat	/	1800 - 3200 mg/kg bw/day	negative	OECD 453	/
xylene	oral	/	rats and mice	/	500 - 1000 mg/kg bw/day	negative	EU B.32	1 - 3 weeks
xylene	oral	NOAEC	rat	/	2171 mg/m3	negative	EPA OPPTS 870.3800	/
phthalic anhydride	oral	NOAEL	rat	105 weeks	1000 mg/kg bw/day	negative	/	/
phthalic anhydride	oral	NOAEL	mouse (male)	72 weeks	3570 mg/kg bw/day	negative	/	/
phthalic anhydride	oral	NOAEL	mouse (female)	72 weeks	1785 mg/kg bw/day	negative	/	/

(g) Reproductive toxicity

Name		Reproductive toxicity type	Туре	Species	Time	value	result	Method	Remark
Styrer	ne	Effects on fertility	NOAEL/LOAEL	rat	60 days	100 - 200 mg/kg bw/day	Positive.	/	Inhalation

Tertility									
StyreneReproductive toxicityLOAEC (P, F1)rat/2.13 mg/LNegative.study: OECDInhalationStyreneReproductive toxicityNOAEC (P, F1)rat/0.64 mg/LNegative.two-generation study: OECDinhalationStyreneReproductive toxicityNOAEC (F2)rat/0.21 mg/LNegative.two-generation study: OECDinhalationStyreneReproductive toxicityNOAEC (F2)rat70 days0.64 mg/LNegative.two-generation study: OECDinhalationStyreneReproductive toxicityNOAEC (F2)rat70 days0.64 mg/LNegative.two-generation study: OECDinhalationStyreneReproductive toxicityNOAEC (F2)rat70 days0.64 mg/LNegative.two-generation study: OECDinhalationStyreneMaternal toxicityNOAEC (F2)rat70 days1.08 - 2.15positive.0.ECD 414615 days: study: OECDStyreneDevelopmental toxicityNOAECrat/1.28 mg/LNegative.0ECD 414614 days: study: OECDStyreneDevelopmental toxicityNOAECrat/1.28 mg/LNegative.0ECD 414614 days: study: OECDStyreneDevelopmental toxicityNOAECrat/1.28 mg/LNegative.0ECD 414614 days: study: OECDStyreneDevelopmental toxicityNOAELrat/1.350 mg/KsNegative. <td>Styrene</td> <td></td> <td>NOAEL/LOAEL</td> <td>rat</td> <td>60 days</td> <td></td> <td>Positive.</td> <td>OECD 422</td> <td>oral</td>	Styrene		NOAEL/LOAEL	rat	60 days		Positive.	OECD 422	oral
SkyreneReproductive NOAEC (P, F1)rat/0.64 mg/LNegative.study.study. OECD study. OECDInhalationSkyreneReproductive toxicityNOAEC (P2)rat/0.21 mg/LNegative.study. OECD study. OECDSkyreneReproductive toxicityLOAEC (P2)rat70 days0.64 mg/LNegative.study. OECD study. OECDSkyreneMaternal toxicityNOAEC /LOAECrat70 days0.64 mg/LNegative.study. OECD study. OECDSkyreneMaternal toxicityNOAEC /LOAECrat50 days1.08 - 2.15 mg/LPositive.OECD 414615 days; inhalationSkyreneMaternal toxicityLOAECrat/1.28 mg/LNegative.OECD 414615 days; inhalationSkyreneDevelopmental toxicityNOAECrat/2.56 mg/LNegative.OECD 414615 days; inhalationSkyreneDevelopmental toxicityNOAECrat/2.56 mg/LNegative.OECD 414614 days; inhalationSkyreneDevelopmental toxicityNOAECrat/1350 mg/KgNegative.OECD 414618 days; inhalationSkyreneDevelopmental toxicityNOAECrat/1350 mg/KgNegative.OECD 41461SkyreneSkyreneNOAECrat/1350 mg/KgNegative.OECD 41471SkyreneSkyreneNOAELrat/1350 mg/Kg<	Styrene		LOAEC (P, F1)	rat	/	2.13 mg/L	Negative.	study; OECD	Inhalation
StyreneMethodication MethodicationNOAEC (F2)rat/ f0.21 mg/LNegative.Megative.Meddy GECDInhalationStyreneReproductive toxicityLOAEC (F2)rat70 days0.64 mg/LNegative.Megative.Mudy GECDInhalationStyreneMaternal toxicityNOAEC/LOAECrat50 days1.08-2.15 mg/LPositive.0 ECD 414f-15 days; inhalationStyreneMaternal toxicityIOAECrat/ f1.28 mg/LPositive.0 ECD 414f-15 days; inhalationStyreneMaternal toxicityNOAECrat/ f/ f1.28 mg/LPositive.0 ECD 414f-15 days; inhalationStyreneMaternal toxicityNOAECrat/ f/ f1.28 mg/LNegative.0 ECD 414f-15 days; inhalationStyreneMaternal developmental toxicityNOAECratrat/ f1.28 mg/LNegative.0 ECD 414f-15 days; inhalationStyreneMaternal developmental doxicityNOAECratrat/ f1.28 mg/LNegative.0 ECD 414f-15 days; inhalationStyreneMaternal developmental doxicityNOAECrationration1.28 mg/LNegative.0 ECD 414f-15 days; inhalationStyreneMaternal developmental strictyNOAECrationration1.28 mg/LNegative.Negative.0 ECD 414inhalationStyreneMaternal dev	Styrene		NOAEC (P, F1)	rat	/	0.64 mg/L	Negative.	study; OECD	Inhalation
StyreneReproductive toxicityLOAEC (F2)rat70 days0.64 mg/LNegative.study; OECDInhalationStyreneMaternal developmental toxicityNOAEC/LOAECrat50 days1.08 - 2.15 mg/LPositive.//InhalationStyreneMaternal toxicityLOAECrat/1.28 mg/LPositive.0ECD 4146-15 days; inhalationStyreneDevelopmental toxicityNOAECrat/2.56 mg/LNegative.0ECD 4146-16 days; inhalationStyreneBevelopmental toxicityNOAECrat/2.56 mg/LNegative.0ECD 4146-16 days; inhalationStyreneBevelopmental toxicityNOAELrat/2.56 mg/LNegative.0ECD 4146-16 days; inhalationstyreneModernal toxicityNOAELrat/1350 mg/RgNegative.0ECD 414oralamorphous stificaReproductive toxicityNOAELrat/1350 mg/RgNegative.0ECD 414oralstyrenePevelopmental toxicityNOAELrat/1350 mg/RgNegative.0ECD 414oralstyreneReproductive toxicityNOAELrat/350 mg/RgNegative.0ECD 414oralstyreneReproductive toxicityNOAELrat/3570 mg/RgNegative.0ECD 414inhalationstyreneReproductive toxicityNOAELrat/217	Styrene		NOAEC (F2)	rat	/	0.21 mg/L	Negative.	study; OECD	Inhalation
Styreneby by b	Styrene		LOAEC (F2)	rat	70 days	0.64 mg/L	Negative.	study; OECD	Inhalation
styreneLoxicityLOAELrat/1.28 mg/LPositive.OELD 414inhalationstyreneloxicityNOAECrat/≥ 2.56 mg/LNegative.OECD 4146-15 days; inhalationstyreneMaternal toxicity+ developmentalNOAECrabbit/2.56 mg/LNegative.OECD 4146-15 days; inhalationstyreneMaternal toxicity+ developmentalNOAECrabbit/2.56 mg/LNegative.OECD 4156-18 days; inhalationstyreneReproductive toxicityNOAELrat//350 mg/kg bw/dayNegative.OECD 4146-18 days; inhalationstyreneReproductive toxicityNOAELrat/128 mg/L897 mg/kg bw/dayNegative.OECD 415oralstyreneMaternal toxicityNOAELrat//350 mg/kg bw/dayNegative.OECD 414oralstyreneMaternal toxicityNOAELrat/128 mg/L897 mg/kg bw/dayNegative.OECD 414oralstyreneMaternal toxicityNOAELrat//1350 mg/kg bw/dayNegative.OECD 414inhalationstyreneMaternal toxicityNOAELrat//1350 mg/kg bw/dayNegative.OECD 414InhalationstyreneDevelopmental toxicityNOAELrat//1700 mg/kg bw/dayNegative.OECD 414Inhalation <t< td=""><td>Styrene</td><td>toxicity + developmental</td><td>NOAEC/LOAEC</td><td>rat</td><td>50 days</td><td></td><td>Positive.</td><td>/</td><td>Inhalation</td></t<>	Styrene	toxicity + developmental	NOAEC/LOAEC	rat	50 days		Positive.	/	Inhalation
SeprenetoxicityNOAECrat/2 2.55 mg/LNegative.OECD 414inhalationSepreneMaternal toxicity + developmental toxicityNOAECrabbit/2.56 mg/LNegative.OECD 4156-18 days; 	Styrene		LOAEC	rat	/	1.28 mg/L	Positive.	OECD 414	
Styrenetoxicity + developmental kokicityNOAECrabbit/ All2.56 mg/LNegative.OECD 4156-18 days; inhalationamorphous silicaReproductive toxicityNOAELrat/ All497 mg/kg bw/dayNegative.OECD 415oralamorphous silicaTeratogenicityNOAELrat/ All1350 mg/kg bw/dayNegative.OECD 414oralamorphous silicaMaternal toxicityNOAELrat/ All1350 mg/kg bw/dayNegative.OECD 414oralamorphous silicaMaternal toxicityNOAELrat/ All1350 mg/kg bw/dayNegative.OECD 414oralamorphous silicaMaternal toxicityNOAELrat/ All2171 mg/m3Negative.OECD 414Inhalationaphthalic bhydrideReproductive toxicityNOAELrat/ All8684 mg/m3Negative.OECD 414Inhalationaphthalic bhydrideReproductive toxicityNOAELrat/ 2 weeks3570 mg/kg bw/dayNegative./ Alloralaphthalic bhydrideReproductive toxicityNOAELmouse (male) (female)12 weeks3570 mg/kg bw/dayNegative./ Alloralaphthalic bhydrideReproductive toxicityNOAELmouse (male) (female)12 weeks1785 mg/kg bw/dayNegative./ Alloralaphthalic bhydrideReproductive toxicityNOAELrat (female)	Styrene		NOAEC	rat	/	≥ 2.56 mg/L	Negative.	OECD 414	
silicatoxicityNOAELrat/bw/dayNegative.OECD 415ofalamorphous silicaTeratogenicityNOAELrat/1350 mg/kg bw/dayNegative.OECD 414oralamorphous silicaMaternal toxicityNOAELrat/1350 mg/kg bw/dayNegative.OECD 414oralamorphous silicaMaternal toxicityNOAELrat/1350 mg/kg bw/dayNegative.OECD 414oralamorphous silicaMaternal toxicityNOAECrat/2171 mg/m3Negative.OECD 414Inhalationamorphous silicaNOAECrat/8684 mg/m3Negative.OECD 414Inhalationaphthalic anhydrideReproductive toxicityNOAELmouse (male)72 weeks3570 mg/kg bw/dayNegative./oralaphthalic anhydrideReproductive toxicityNOAELmouse (male)72 weeks3570 mg/kg bw/dayNegative./oralaphthalic anhydrideReproductive toxicityNOAELmouse (male)72 weeks1785 mg/kg bw/dayNegative./oralaphthalic anhydrideNOAELrat (female)105 weeks1000 mg/kg bw/dayNegative./oralaphthalic anhydrideMaternal toxicityNOAELrat/1000 mg/kg bw/dayNegative./oralaphthalic anhydrideMaternal toxicityNOAELrat/<	Styrene	toxicity + developmental	NOAEC	rabbit	/	2.56 mg/L	Negative.	OECD	
silicaTeratogenicityNOAELrat/bw/dayNegative.DECD 414oratamorphous silicaMaternal toxicityNOAELrat/1350 mg/kg bw/dayNegative.OECD 414oralxyleneDevelopmental 	amorphous silica		NOAEL	rat	/		Negative.	OECD 415	oral
silical toxicitytoxicityNOAELrat/bw/dayNegative.OECD 414oratsyleneDevelopmental toxicityNOAECrat/2171 mg/m³Negative.OECD 414InhalationsyleneTeratogenicityNOAECrat/8684 mg/m³Negative.OECD 414Inhalationphthalic anhydrideReproductive 	amorphous silica	Teratogenicity	NOAEL	rat	/		Negative.	OECD 414	oral
KyleneKoxicityNOAECrat/21/1 mg/m²Negative.OECD 414InhalationkyleneTeratogenicityNOAECrat/8684 mg/m³Negative.OECD 414Inhalationphthalic anhydrideReproductive toxicityNOAELmouse (male)72 weeks3570 mg/kg bw/dayNegative./OECD 414Inhalationphthalic 			NOAEL	rat	/		Negative.	OECD 414	oral
Phthalic anhydride       Reproductive toxicity       NOAEL       mouse (male)       72 weeks       3570 mg/kg bw/day       Negative.       /       oral         Phthalic anhydride       Reproductive toxicity       NOAEL       mouse (female)       72 weeks       1785 mg/kg bw/day       Negative.       /       oral         Phthalic anhydride       Reproductive toxicity       NOAEL       rat (female)       105 weeks       1000 mg/kg bw/day       Negative.       /       oral         Phthalic anhydride       Maternal toxicity       NOAEL       rat       /       1000 mg/kg bw/day       Negative.       /       oral         Phthalic anhydride       Maternal toxicity       NOAEL       rat       /       1000 mg/kg bw/day       Positive.       /       oral	kylene		NOAEC	rat	/	2171 mg/m³	Negative.	OECD 414	Inhalation
anhydridetxicityNOAELmouse (mate)72 weeksbw/dayNegative.7oralbhthalic anhydrideReproductive toxicityNOAELmouse (female)72 weeks1785 mg/kg bw/dayNegative./oralbhthalic anhydrideReproductive toxicityNOAELrat (female)105 weeks1000 mg/kg bw/dayNegative./oralbhthalic anhydrideMaternal toxicityNOAELrat (female)105 weeks1000 mg/kg bw/dayNegative./oralbhthalic toxicityMaternal toxicityNOAELrat/1000 mg/kg bw/dayPositive./oralbhthalic toxicityTeratogenicityNOAELrat/1700 mg/kg bw/dayPositive./oral	kylene	Teratogenicity	NOAEC	rat	/	8684 mg/m³	Negative.	OECD 414	Inhalation
anhydride     toxicity     NOAEL     (female)     12 weeks     bw/day     Negative.     /     orat       phthalic anhydride     Reproductive toxicity     NOAEL     rat (female)     105 weeks     1000 mg/kg bw/day     Negative.     /     oral       phthalic anhydride     Maternal toxicity     NOAEL     rat     /     1000 mg/kg bw/day     Positive.     /     oral       phthalic     Teratogenicity     NOAEL     rat     /     1700 mg/kg     Positive.     /     oral	phthalic anhydride		NOAEL	mouse (male)	72 weeks		Negative.	/	oral
anhydride     toxicity     NOAEL     rat (remate)     Ios weeks     bw/day     Negative.     /     orat       phthalic anhydride     Maternal toxicity     NOAEL     rat     /     1000 mg/kg bw/day     Positive.     /     oral       phthalic     Teratogenicity     NOAEL     rat     /     1700 mg/kg     Positive.     /     oral			NOAEL		72 weeks		Negative.	/	oral
anhydride toxicity NOAEL rat / 1700 mg/kg Positive / oral			NOAEL	rat (female)	105 weeks		Negative.	/	oral
			NOAEL	rat	/		Positive.	/	oral
		Teratogenicity	NOAEL	rat	/		Positive.	/	oral

# Summary of evaluation of the CMR properties Suspected of damaging the unborn child.

(h) STOT-single exposure

For components

Name	Exposure route	Туре	Species	Time	Exposure	organ	value	result	Method	Remark
phthalic anhydride	inhalation	-	/	/	/	/	/	May cause respiratory irritation.	/	/

# Additional information

May cause respiratory irritation.

# (i) STOT-repeated exposure

Name	Exposure route	Туре	Species	Time	Exposure	organ	value	result	Method	Remark	
------	-------------------	------	---------	------	----------	-------	-------	--------	--------	--------	--

Styrene	-		1	/	/	ear	/	Causes damage to organs through prolonged or repeated exposure.	/	/
Styrene	inhalation	NOAEC	rat (male)	28 days	/	/	3.47 mg/L air	/	/	/
Styrene	inhalation	NOAEC	/	28 days	/	/	2.13 mg/L	/	/	ototoxicity
Styrene	inhalation	NOAEC	mouse	28 days	/	/	0.181 mg/L	/	OECD 412	/
Styrene	inhalation	NOAEC	rat	28 days	/	/	0.688 mg/L	/	OECD 412	/
Styrene	inhalation	NOAEC	rat	90 days	/	nose	0.85 mg/L	/	/	/
Styrene	inhalation	NOAEC	rat	90 days	/	overall	2.13 mg/L	/	/	/
Styrene	oral	NOAEL	rat	/	/	/	1000 mg/kg bw/day	/	/	/
Styrene	oral	LOAEL	rat	/	/	/	2000 mg/kg bw/day	/	/	/
Styrene	oral	NOAEL	mouse	/	/	/	150 mg/kg bw/day	/	/	/
Styrene	oral	LOAEL	mouse	/	/	/	300 mg/kg bw/day	/	/	/
Styrene	inhalation	LOAEC	rat	/	/	/	0.21 mg/L	/	OECD 453	/
titanium dioxide	oral	NOEL	rat	90 days	/	/	24000 mg/kg bw/day	/	/	/
titanium dioxide	inhalation	NOEC	rat	/	/	/	50 mg/m <sup>3</sup>	/	OECD 413	/
titanium dioxide	inhalation	NOEC	rat	/	/	/	10 mg/m <sup>3</sup>	/	/	/
amorphous silica	oral	NOAEL	rat	/	/	/	4000 - 4500 mg/kg/day	/	OECD 408	/
amorphous silica	inhalation	NOEC	rat	/	/	/	1.3 mg/m <sup>3</sup>	/	/	/
amorphous silica	inhalation	NOEC	rat	90 days	/	/	< 1.3 mg/m <sup>3</sup>	/	OECD 413	/
amorphous silica	dermal	NOAEL	rabbit	/	/	/	≥ 10000 mg/kg bw/day	/	/	/
xylene	oral	NOAEL	rat	/	/	/	250 mg/kg bw/day	/	/	/
xylene	inhalation	NOAEC	rat	/	/	/	≥ 3515 mg/m <sup>3</sup>	/	/	/
phthalic anhydride	oral	NOAEL	rat	7 weeks	/	/	1250 mg/kg bw/day	/	/	/
phthalic anhydride	oral	LOAEL	rat	7 weeks	/	/	2500 mg/kg bw/day	/	/	/
phthalic anhydride	oral	NOAEL	rat	105 weeks	/	/	500 mg/kg bw/day	/	/	/
phthalic anhydride	oral	LOAEL	mouse (male/femal e)	72 weeks	/	/	1717 - 2340 mg/kg bw/day	/	/	/
Cobalt bis(2- ethylhexan oate)	-	NOEL	rat (female)	/	/	/	5 mg/kg bw/day	/	/	/
Cobalt bis(2- ethylhexan oate)	-	NOAEL	rat (male)	/	/	/	40 mg/kg bw/day	/	OECD 422	/

Additional information

Causes damage to organs through prolonged or repeated exposure.

(j) Aspiration hazard

# No information.

Symptoms related to the physical, chemical and toxicological characteristics No information. Interactive effects

No information.

# 11.2 Information on other hazards Endocrine disrupting properties

# No information.

Other information

No information.

CECTION		AL INFORMATION
SECTION	12. ECOLOUIC	

# 12.1 Toxicity

Acute (short-term) toxicity

Name	Туре	value	Exposure time	Species	organism	Method	Remark
Styrene	LC <sub>50</sub>	4.9 mg/L	72 h	algae	Pseudokirchneriel la subcapitata	EPA OTS 797.1050 EPA OTS 797.1050	/
Styrene	EC <sub>50</sub>	4.7 mg/L	48 h	crustacea	Daphnia magna	OECD 202	/
Styrene	NOEC	1.9 mg/L	/	crustacea	Daphnia magna	OECD 202	/
Styrene	LC <sub>50</sub>	4.02 mg/L	96 h	fish	Pimephales promelas	OECD 203	/
Styrene	-	500 mg/L	30 min	bacteria	Activated sludge	OECD 209	/
titanium dioxide	EC <sub>50</sub>	10000 mg/L	72 h	algae	Skeletonema costatum	ISO 10253 ISO 10253	/
titanium dioxide	LC <sub>50</sub>	2000 mg/L	48 h	crustacea	Daphnia magna	/	/
titanium dioxide	EC <sub>50</sub>	> 100 mg/L	96 h	fish	Brachydanio rerio	/	/
titanium dioxide	LC <sub>50</sub>	> 1000 mg/L	96 h	fish	Fundulus heteroclitus	/	/
titanium dioxide	LC0	> 1000 mg/L	48 h	fish	Leuciscus idus	OECD 203 OECD 203	/
titanium dioxide	EC <sub>50</sub>	> 1000 mg/L	3 h	microorganisms	/	/	/
titanium dioxide	NOEC	≥ 1000 mg/L	3 h	microorganisms	Activated sludge	OECD 209 OECD 209	/
titanium dioxide	NOEC	5600 mg/L	72 h	algae	Skeletonema costatum	ISO 10253 ISO 10253	/
titanium dioxide	NOEC	≥ 3 mg/L	48 h	crustacea	Daphnia magna	OECD 202, OECD 209 OECD 202, OECD 209	/
talc	LC <sub>50</sub>	100 mg/L	96 h	fish	Danio rerio	/	/
amorphous silica	EC <sub>50</sub>	≥ 1000 mg/L	24 h	crustacea	Daphnia magna	OECD 202	/
amorphous silica	LC <sub>50</sub>	> 10000 mg/L	96 h	fish	Brachydanio rerio	OECD 203	/
xylene	EC <sub>50</sub>	2.2 mg/L	73 h	algae	Pseudokirchneriel la subcapitata	OECD 201	/
xylene	EC <sub>50</sub>	> 3.4 mg/L	48 h	crustacea	/	/	/
xylene	NOEC	3.4 mg/L	48 h	crustacea	Ceriodaphnia dubia	US EPA 600/4-91- 003 US EPA 600/4-91-003	/

xylene	LC <sub>50</sub>	2.6 mg/L	96 h	fish	Oncorhynchus mykiss	/	/
xylene	LC <sub>50</sub>	8.4 mg/L	96 h	fish	Oncorhynchus mykiss	OECD 203	/
xylene	EC <sub>50</sub>	96 mg/L	24 h	microorganisms	Nitrosomonas sp.	/	/
xylene	NOEC	157 mg/L	3 h	microorganisms	Activated sludge	OECD 209 OECD 209	/
xylene	NOEC	0.44 mg/L	73 h	algae	Pseudokirchneriel la subcapitata	OECD 201	/
phthalic anhydride	NOEC	32 mg/L	72 h	algae	Pseudokirchneriel la subcapitata	OECD 201 OECD 201	/
phthalic anhydride	LC <sub>50</sub>	> 99 mg/L	96 h	fish	Oryzias latipes	OECD 203 OECD 203	/
phthalic anhydride	EC <sub>50</sub>	> 1000 mg/L	3 h	microorganisms	Activated sludge	ISO 8192 ISO 8192	/
phthalic anhydride	EC <sub>50</sub>	13 mg/L	16 h	microorganisms	Pseudomonas putida	ISO 10712 ISO 10712	/
phthalic anhydride	EC <sub>50</sub>	731 mg/L	/	Plants	Lactuca sativa	/	/
phthalic anhydride	EC <sub>50</sub>	68 mg/L	72 h	algae	/	/	/
phthalic anhydride	EC <sub>50</sub>	71 mg/L	48 h	crustacea	Daphnia magna	OECD 202	/
Cobalt bis(2- ethylhexanoate)	EC <sub>50</sub>	283.1 µg/l	72 h	algae	/	/	/
Cobalt bis(2- ethylhexanoate)	EC <sub>50</sub>	654.2 µg/l	72 h	algae	Pseudokirchneriel la subcapitata	OECD 201	/

# Chronic (long-term) toxicity

Name	Туре	value	Exposure time	Species	organism	Method	Remark
Styrene	NOEC	1.01 mg/l	21 days	crustacea	Daphnia magna	/	/
Styrene	LOEC	2.06 mg/l	21 days	crustacea	Daphnia magna	/	/
Styrene	EC50	1.88 mg/l	21 days	crustacea	Daphnia magna	OECD 203 OECD 203	/
Styrene	LC <sub>50</sub>	120 mg/kg soil dw	14 days	earthworms	Eisenia fetida	OECD 207	/
Styrene	LOEC	65 mg/kg soil dw	/	earthworms	Eisenia fetida	OECD 207	burrowing time and mean percent weight change
Styrene	LOEC	180 mg/kg soil dw	/	earthworms	Eisenia fetida	OECD 207	survival
Styrene	NOEC	34 mg/kg soil dw	/	earthworms	Eisenia fetida	OECD 207	mean percent weight change
xylene	NOEC	> 1.3 mg/l	56 days	fish	Oncorhynchus mykiss	/	/
phthalic anhydride	NOEC	16 mg/l	21 days	crustacea	Daphnia magna	OECD 211	/
phthalic anhydride	EC50	42 mg/l	21 days	crustacea	Daphnia magna	OECD 211 OECD 211	/
phthalic anhydride	LC <sub>50</sub>	560 mg/l	7 days	fish	Danio rerio	OECD 210 OECD 210	/
phthalic anhydride	LOEC	32 mg/l	60 days	fish	/	1	/
phthalic anhydride	NOEC	10 mg/l	60 days	fish	/	OECD 210 OECD 210	/
Cobalt bis(2- ethylhexanoate)	NOEC/EC10	86.4 µg/L	7 days	crustacea	Ceriodaphnia dubia	/	mortality
Cobalt bis(2- ethylhexanoate)	NOEC/EC10	19.7 - 20.1 µg/L	7 days	crustacea	Ceriodaphnia dubia	/	reproduction

# 12.2 Persistence and degradability

# Abiotic degradation, physical- and photo-chemical elimination No information.

#### No information.

Biodegradation

# For components

Name	Туре	Rate	Time	Evaluation	Method	Remark
Styrene	biodegradability	87 %	20 days	readily biodegradable	Similar to OECD 301D	/
xylene	biodegradability	87.8 %	28 days	readily biodegradable	OECD 301F	/
phthalic anhydride	biodegradability	68 %	10 days	readily biodegradable	OECD 301 D	/
phthalic anhydride	biodegradability	74 %	30 days	readily biodegradable	OECD 301 D	/
Cobalt bis(2- ethylhexanoate)	biodegradability	60 %	10 days	readily biodegradable	OECD 301 D	/

# 12.3 Bioaccumulative potential

# Partition coefficient

# For components

Name	Media	value	Temperature °C	рН	Concentration	Method
Styrene	Log Pow	3	/	/	/	/
xylene	Log Pow	2.77 - 3.15	/	/	/	/
phthalic anhydride	Log Pow	1.6	/	/	/	/

# Bioconcentration factor (BCF)

For components

Name	Species	organism	value	Duration	Evaluation	Method	Remark
Styrene	BCF	/	74	/	/	/	Calculated value
titanium dioxide	BCF	Oncorhynchus mykiss	20	14 days	/	/	/
xylene	BCF	Oncorhynchus mykiss	25.9	56 days	/	/	/
phthalic anhydride	BCF	/	3.16 - 3.4	/	/	/	Calculated value

# 12.4 Mobility in soil

# Known or predicted distribution to environmental compartments No information.

# Surface tension

No information.

# Adsorption/Desorption

For components

Name	Туре	Criterion	value	Evaluation	Method	Remark
Styrene	Soil	/	352	/	/	Кос
Styrene	Soil	log KOC	2.55	/	/	/
xylene	Soil	log KOC	2.73	/	/	/
xylene	Soil	/	537	/	/	Кос
phthalic anhydride	Soil	/	31	/	/	Кос

# 12.5 Results of PBT and vPvB assessment

No evaluation.

12.6 Endocrine disrupting properties

No information.

# 12.7 Other adverse effects

#### No information.

## 12.8 Additional information

#### For product

Harmful to aquatic organisms. May cause long term adverse effects in the aquatic environment. Do not allow to reach ground water, water courses or sewage system.

#### For components

## titanium dioxide

This substance is not considered to be persistent, bioaccumulative and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulative (vPvB).

#### amorphous silica

This substance is not considered to be persistent, bioaccumulative and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulative (vPvB).

### xylene

This substance is not considered to be persistent, bioaccumulative and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulative (vPvB).

#### phthalic anhydride

This substance is not considered to be persistent, bioaccumulative and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulative (vPvB).

# **SECTION 13: DISPOSAL CONSIDERATIONS**

## 13.1 Waste treatment methods

Product / Packaging disposal

#### Waste chemical

Disposal must be made according to official regulations: deliver it to authorised collector/remover/transformer of hazardous waste. Do not allow product to reach drains/sewage systems. Dispose of in accordance with applicable waste disposal regulation.

Waste codes / waste designations according to LoW

No information.

Packaging

Uncleaned containers are classified as hazardous waste - they should be handled in the same manner as the contents. Deliver completely emptied containers to approved waste disposal authorities. Uncleaned containers should not be perforated, cut or welded. Empty containers represent a fire hazard as they may contain flammable product residues and vapour.

Waste codes / waste designations according to LoW

No information.

Waste treatment-relevant information No information.

Sewage disposal-relevant information No information.

Other disposal recommendations No information.

# **SECTION 14: TRANSPORT INFORMATION**

100/010			
ADR/RID	IMDG	ΙΑΤΑ	ADN
14.1 UN number or II	D number		
UN 1866	UN 1866	UN 1866	UN 1866
14.2 UN proper shipp	ping name		
RESIN SOLUTION	RESIN SOLUTION	RESIN SOLUTION	RESIN SOLUTION
14.3 Transport hazar	d class(es)		
3	3	3	3
3	3	3	
14.4 Packing group			
	III	Ш	111
14.5 Environmental h	nazards		
NO	NO	NO	NO
14.6 Special precauti	ons for user		
Limited quantities 5 L Packing Instructions P001, R001 Special packing provisions PP1 Transport category 3 Tunnel restriction code (E)	Limited quantities 5 L EmS F-E, <u>S-E</u> Flash point 31 °C	Limited Quantity, Packing Instructions (Ltd Qty, Pkg Inst) Y344 Limited Quantity, Maximum Net Quantity/Package (Ltd Qty, Max Net Qty/Pkg) 10 L Packing Instructions (Pkg Inst) 355 Maximum Net Quantity/Package (Max Net Qty/Pkg) 25 L Special provisions A3	Limited quantities 5 L
14.7 Maritime transp	ort in bulk according to IMO instruments		
	Goods may not be carried in bulk in bulk containers, containers or vehicles.		

# **SECTION 15: REGULATORY INFORMATION**

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

- Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (including last amendment Commission Regulation (EU) 2020/878)

- Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures

Information according 2004/42/EC about limitation of emissions of volatile organic compounds (VOC-guideline) not applicable

Regulation EC 648/2004 on detergents No information.

Special instructions

Observe the regulations on employment and protection against dangerous substances for young people, pregnant

#### women and nursing mothers.

15.2 Chemical Safety Assessment

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

# **SECTION 16: OTHER INFORMATION**

Indication of changes No information. Kev literature references and sources for data Safety Data Sheet, Cure It Topcoat, G& B Northwest Ltd, Revision Date: 6th December 2018, Version: 1.2. Abbreviations and acronyms ATE - Acute Toxicity Estimate ADR - Agreement concerning the International Carriage of Dangerous Goods by Road ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways CEN - European Committee for Standardisation C&L - Classification and Labelling CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008 CAS# - Chemical Abstracts Service number CMR - Carcinogen, Mutagen, or Reproductive Toxicant CSA - Chemical Safety Assessment CSR - Chemical Safety Report DMEL - Derived Minimal Effect Level DNEL - Derived No Effect Level DPD - Dangerous Preparations Directive 1999/45/EC DSD - Dangerous Substances Directive 67/548/EEC DU - Downstream User EC - European Community ECHA - European Chemicals Agency EC-Number - EINECS and ELINCS Number (see also EINECS and ELINCS) EEA - European Economic Area (EU + Iceland, Liechtenstein and Norway) EEC - European Economic Community EINECS - European Inventory of Existing Commercial Substances ELINCS - European List of notified Chemical Substances EN - European Standard EQS - Environmental Quality Standard EU - European Union Euphrac - European Phrase Catalogue EWC - European Waste Catalogue (replaced by LoW – see below) GES - Generic Exposure Scenario GHS - Globally Harmonized System IATA - International Air Transport Association ICAO-TI - Technical Instructions for the Safe Transport of Dangerous Goods by Air IMDG - International Maritime Dangerous Goods IMSBC - International Maritime Solid Bulk Cargoes **IT - Information Technology** IUCLID - International Uniform Chemical Information Database IUPAC - International Union for Pure Applied Chemistry JRC - Joint Research Centre Kow - octanol-water partition coefficient LC50 - Lethal Concentration to 50 % of a test population LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose) LE - Legal Entity LoW - List of Wastes (see http://ec.europa.eu/environment/waste/framework/list.htm) LR - Lead Registrant M/I - Manufacturer / Importer MS - Member States MSDS - Material Safety Data Sheet **OC** - Operational Conditions

OECD - Organization for Economic Co-operation and Development **OEL - Occupational Exposure Limit** OJ - Official Journal **OR - Only Representative** OSHA - European Agency for Safety and Health at work PBT - Persistent, Bioaccumulative and Toxic substance PEC - Predicted Effect Concentration PNEC(s) - Predicted No Effect Concentration(s) **PPE - Personal Protection Equipment** (Q)SAR - Qualitative Structure Activity Relationship REACH - Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006 RID - Regulations concerning the International Carriage of Dangerous Goods by Rail RIP - REACH Implementation Project RMM - Risk Management Measure SCBA - Self-Contained Breathing Apparatus SDS - Safety data sheet SIEF - Substance Information Exchange Forum SME - Small and Medium sized Enterprises STOT - Specific Target Organ Toxicity (STOT) RE - Repeated Exposure (STOT) SE - Single Exposure SVHC - Substances of Very High Concern **UN - United Nations** vPvB - Very Persistent and Very Bioaccumulative List of relevant H phrases H226 Flammable liquid and vapour. H302 Harmful if swallowed. H304 May be fatal if swallowed and enters airways. H312 Harmful in contact with skin. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H319 Causes serious eye irritation. H332 Harmful if inhaled. H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled. H335 May cause respiratory irritation. H336 May cause drowsiness or dizziness. H361d Suspected of damaging the unborn child. H372 Causes damage to organs through prolonged or repeated exposure. H373 May cause 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.