

# Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878 Product Reference code:according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878 SDS Ref. (EU): SMCB-SDS

Issue date: 13/07/2015 Revision date: 17/11/2022 Supersedes version of: 18/08/2020 Version: 4.1

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

#### 1.1. Product identifier

Product form : Mixture

Trade name : SMC CARBON FIBRE REINFORCED FILLER - BLACK

UFI : 7TY0-10G0-T00H-JDFV

Product code : SMCB/2
Type of product : Fillers
Product group : Bodyfiller

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

#### 1.2.1. Relevant identified uses

Main use category : Industrial use, Professional use

Use of the substance/mixture : Fillers, putties, plasters, modelling clay

Function or use category : Fillers

#### 1.2.2. Uses advised against

No additional information available

# 1.3. Details of the supplier of the safety data sheet

Manufacturer Importer

U-POL Limited Ltd U-POL Netherlands B.V. B.V. Denington Road Hoorgoorddreef 15

GB- NN8 2QH Wellingborough - Northamptonshire NL- 1101BA Amsterdam

United Kingdom Netherlands T +44 (0) 1933 230310 T +31 20 240 2216

 $\underline{\text{technicalsupport}@\text{u-pol.com}} - \underline{\text{www.u-pol.com}} - \underline{\text{www.u-pol.com}} - \underline{\text{www.u-pol.com}}$ 

#### 1.4. Emergency telephone number

Emergency number : CHEMTREC: +44 (0) 870 8200418 (24 hrs)

Country	Organisation/Company	Address	Emergency number	Comment
Ireland	National Poisons Information Centre Beaumont Hospital	PO Box 1297 Beaumont Road 9 Dublin	+353 1 809 2566 (Healthcare professionals- 24/7) +353 1 809 2166 (public, 8am - 10pm, 7/7)	
United Kingdom	NHS England, Scotland & Wales	-	Call 111 or a Doctor	In Northern Ireland, contact your local GP or pharmacist during normal hours (www.gpoutofhours.h scni.net)

# **SECTION 2: Hazards identification**

## 2.1. Classification of the substance or mixture

#### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Skin corrosion/irritation, Category 2 H315
Serious eye damage/eye irritation, Category 2 H319

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Reproductive toxicity, Category 2 H361
Specific target organ toxicity — Repeated exposure, Category 1 H372

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

#### Adverse physicochemical, human health and environmental effects

Suspected of damaging the unborn child. Causes damage to organs (hearing organs) through prolonged or repeated exposure (inhalation). Causes skin irritation. Causes serious eye irritation.

#### 2.2. Label elements

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

Hazard pictograms (CLP)





GHS07

7 GHS

Signal word (CLP) : Danger Contains : styrene

Hazard statements (CLP) : H315 - Causes skin irritation.

H319 - Causes serious eye irritation.

H361 - Suspected of damaging the unborn child.

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

exposure (inhalation).

Precautionary statements (CLP) : P260 - Do not breathe fume, vapours.

P264 - Wash hands thoroughly after handling.

P280 - Wear eye protection, protective clothing, protective gloves. P308+P313 - IF exposed or concerned: Get medical advice/attention. P337+P313 - If eye irritation persists: Get medical advice/attention.

P501 - Dispose of contents/container to hazardous or special waste collection point, in

accordance with local, regional, national and/or international regulation.

#### 2.3. Other hazards

Contains no PBT/vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

Component	
styrene (100-42-5)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
1,4-dihydroxybenzene; hydroquinone; quinol (123-31-9)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605

#### **SECTION 3: Composition/information on ingredients**

#### 3.1. Substances

Not applicable

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#### 3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
styrene (Note D)	CAS-No.: 100-42-5 EC-No.: 202-851-5 EC Index-No.: 601-026-00-0 REACH-no: 01-2119457861- 32	5 – 20	Flam. Liq. 3, H226 Acute Tox. 4 (Inhalation), H332 Acute Tox. 4 (Inhalation:vapour), H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Repr. 2, H361d STOT SE 3, H335 STOT RE 1, H372 Asp. Tox. 1, H304 Aquatic Chronic 3, H412
1,4-dihydroxybenzene; hydroquinone; quinol	CAS-No.: 123-31-9 EC-No.: 204-617-8 EC Index-No.: 604-005-00-4 REACH-no: 01-2119524016- 51	< 0.1	Acute Tox. 4 (Oral), H302 Eye Dam. 1, H318 Skin Sens. 1, H317 Muta. 2, H341 Carc. 2, H351 Aquatic Acute 1, H400 (M=10)

Note D: Certain substances which are susceptible to spontaneous polymerisation or decomposition are generally placed on the market in a stabilised form. It is in this form that they are listed in Part 3. However, such substances are sometimes placed on the market in a non-stabilised form. In this case, the supplier must state on the label the name of the substance followed by the words 'non-stabilised'.

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

#### **SECTION 4: First aid measures**

#### 4.1. Description of first aid measures

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

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.

First-aid measures after skin contact : Wash skin with plenty of water. Take off contaminated clothing. If skin irritation occurs: Get medical advice/attention.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy

to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

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

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

Symptoms/effects after skin contact : Irritation. Repeated exposure may cause skin dryness or cracking.

Symptoms/effects after eye contact : Eye irritation.

# 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 : Water spray. Dry powder. Foam.

# 5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Toxic fumes may be released.

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# 5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained

breathing apparatus. Complete protective clothing.

#### **SECTION 6: Accidental release measures**

#### 6.1. Personal precautions, protective equipment and emergency procedures

General measures : Remove ignition sources.

6.1.1. For non-emergency personnel

Protective equipment : Safety glasses. Protective clothing. Gloves.

Emergency procedures : Ventilate spillage area. Do not breathe vapours, fume. Avoid contact with skin and eyes.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information

refer to section 8: "Exposure controls/personal protection".

#### 6.2. Environmental precautions

Avoid release to the environment.

#### 6.3. Methods and material for containment and cleaning up

For containment : Contain released product, collect/pump into suitable containers. Collect spillage.

Methods for cleaning up : Mechanically recover the product. Notify authorities if product enters sewers or public

waters.

Other information : Dispose of materials or solid residues at an authorized site.

#### 6.4. Reference to other sections

For further information refer to section 13.

#### **SECTION 7: Handling and storage**

# 7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Obtain special instructions before use. Do not

handle until all safety precautions have been read and understood. Wear personal protective equipment. Do not breathe vapours, fume. Avoid contact with skin and eyes.

Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this

product. Always wash hands after handling the product.

### 7.2. Conditions for safe storage, including any incompatibilities

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

Storage temperature :  $< 25 \, ^{\circ}\text{C}$ 

Storage area : Store in a well-ventilated place. Special rules on packaging : Keep only in original container.

#### 7.3. Specific end use(s)

No additional information available

#### **SECTION 8: Exposure controls/personal protection**

### 8.1. Control parameters

#### 8.1.1 National occupational exposure and biological limit values

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1,4-dihydroxybenzene; hydroquinone; quinol	(123-31-9)			
Ireland - Occupational Exposure Limits				
Local name	Hydroquinone [p-Dihydroxybenzene]			
OEL TWA [1]	0.5 mg/m³			
Remark	Sens. (In the workplace respiratory or dermal exposures to sensitising agents may occur. Sensitizers may evoke respiratory or dermal reactions, e.g. asthma, rhinitis and allergic contact dermatitis. The notation does not distinguish between respiratory or dermal sensitisation. Chemical agents that are sensitizers present special problems in the workplace. Should an employee become sensitised, subsequent exposure may cause intense responses, even at low exposure concentrations well below the OELV. Exposure should be eliminated or significantly reduced through control measures such as engineering and process controls and use of personal protective equipment (PPE))			
Regulatory reference	Chemical Agents Code of Practice 2020			
United Kingdom - Occupational Exposure Limits				
Local name	Hydroquinone			
WEL TWA (OEL TWA) [1]	0.5 mg/m³ 0.5 mg/m³			
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE			
styrene (100-42-5)				
Ireland - Occupational Exposure Limits				
Local name	Styrene [Phenylethylene, Vinyl benzene]			
OEL TWA [1]	85 mg/m³			
OEL TWA [2]	20 ppm			
OEL STEL	170 mg/m³			
OEL STEL [ppm]	40 ppm			
Regulatory reference	Chemical Agents Code of Practice 2020			
United Kingdom - Occupational Exposure Limits				
Local name	Styrene			
WEL TWA (OEL TWA) [1]	430 mg/m³			
WEL TWA (OEL TWA) [2]	100 ppm			
WEL STEL (OEL STEL)	1080 mg/m³			
WEL STEL (OEL STEL) [ppm]	250 ppm			
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE			

# 8.1.2. Recommended monitoring procedures

No additional information available

### 8.1.3. Air contaminants formed

No additional information available

#### 8.1.4. DNEL and PNEC

styrene (100-42-5)		
DNEL/DMEL (Workers)		
Acute - systemic effects, inhalation	289 mg/m³	
Acute - local effects, inhalation 306 mg/m³		
Long-term - systemic effects, dermal	406 mg/kg bodyweight/day	

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styrene (100-42-5)		
Long-term - systemic effects, inhalation	85 mg/m³	
DNEL/DMEL (General population)		
Acute - systemic effects, inhalation	174.25 mg/m³	
Acute - local effects, inhalation	182.75 mg/m³	
Long-term - systemic effects,oral	2.1 mg/kg bodyweight/day	
Long-term - systemic effects, inhalation	10.2 mg/m³	
Long-term - systemic effects, dermal	343 mg/kg bodyweight/day	
PNEC (Water)		
PNEC aqua (freshwater)	0.028 mg/l	
PNEC aqua (marine water)	0.014 mg/l	
PNEC aqua (intermittent, freshwater)	0.04 mg/l	
PNEC (Sediment)		
PNEC sediment (freshwater)	0.614 mg/kg dwt	
PNEC sediment (marine water)	0.307 mg/kg dwt	
PNEC (Soil)		
PNEC soil	0.2 mg/kg dwt	
PNEC (STP)		
PNEC sewage treatment plant	5 mg/l	

#### 8.1.5. Control banding

No additional information available

# 8.2. Exposure controls

#### 8.2.1. Appropriate engineering controls

#### Appropriate engineering controls:

Ensure good ventilation of the work station.

# 8.2.2. Personal protection equipment

# Personal protective equipment:

Gloves. Protective clothing. Safety glasses.

# Personal protective equipment symbol(s):









# 8.2.2.1. Eye and face protection

### Eye protection:

Safety glasses

Eye protection				
Туре	Field of application	Characteristics	Standard	
Safety glasses	Dust	clear		

#### 8.2.2.2. Skin protection

# Skin and body protection:

Wear suitable protective clothing

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#### Hand protection:

Protective gloves

Hand protection					
Туре	Material	Permeation	Thickness (mm)	Penetration	Standard
	Nitrile rubber (NBR), Neoprene rubber (HNBR), Polyvinylalcohol (PVA), Viton	6 (> 480 minutes)	0.4		EN 374-3

#### Other skin protection

#### Materials for protective clothing:

Impermeable clothing

#### 8.2.2.3. Respiratory protection

#### Respiratory protection:

[In case of inadequate ventilation] wear respiratory protection.

Respiratory protection				
Device	Filter type	Condition	Standard	
Breathing apparatus, Gas filters	Type A - High-boiling (>65 °C) organic compounds		EN 140, EN 136, EN 143, EN 145, EN 149	

#### 8.2.2.4. Thermal hazards

No additional information available

# 8.2.3. Environmental exposure controls

#### Environmental exposure controls:

Avoid release to the environment.

# **SECTION 9: Physical and chemical properties**

#### 9.1. Information on basic physical and chemical properties

Physical state : Solid
Colour : Black.

Appearance : Fibrous. Paste. Odour : aromatic. Odour threshold : Not available Melting point : Not available Freezing point : Not applicable Boiling point : Not available Flammability : Non flammable. Explosive limits : Not applicable : Not applicable Lower explosion limit Upper explosion limit : Not applicable

Flash point : 32 °C (does not sustain combustion)

Auto-ignition temperature : Not applicable
Decomposition temperature : Not available
pH : Not available
pH solution : Not available
Viscosity, kinematic : > 20.5 mm²/s

Solubility : insoluble in water, soluble in most organic solvents.

Partition coefficient n-octanol/water (Log Kow) : Not available Vapour pressure : Not available Vapour pressure at 50 °C : Not available

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Density : 1.66 (1.64 – 1.68) g/cm<sup>3</sup>

Relative density : Not applicable Relative vapour density at 20 °C : Not applicable : Not available Particle size Particle size distribution Not available Particle shape Not available Particle aspect ratio Not available Particle aggregation state : Not available Particle agglomeration state : Not available Particle specific surface area : Not available Particle dustiness : Not available

#### 9.2. Other information

#### 9.2.1. Information with regard to physical hazard classes

Not sustained combustibility : Yes

9.2.2. Other safety characteristics

VOC content : 187 g/l

# **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

#### 10.2. Chemical stability

Stable under normal conditions.

#### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

#### 10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

# 10.5. Incompatible materials

No additional information available

#### 10.6. Hazardous decomposition products

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

# **SECTION 11: Toxicological information**

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

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

talc (14807-96-6)	
LD50 oral rat	> 5000 mg/kg bodyweight (OECD 423: Acute Oral Toxicity – Acute Toxic Class Method, Rat, Male, Experimental value, Oral, 14 day(s))
LD50 dermal rat	> 2000 mg/kg bodyweight (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male / female, Experimental value, Dermal, 14 day(s))
LC50 Inhalation - Rat	> 2.1 mg/l (OECD 403: Acute Inhalation Toxicity, 4 h, Rat, Male / female, Experimental value, Inhalation (aerosol), 15 day(s))

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LD50 oral rat   > 2000 mg/kg (OECD Guideline 425 (Acute Oral Toxicity: Up-and-Down Profemale, Experimental value)	,
LD50 oral rat  > 8000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acc Toxicity)  LC50 Inhalation - Rat  > 4.6 mg/l air (Equivalent or similar to OECD 403, 4 h, Rat, Experimental va (dust))	ute Oral
LC50 Inhalation - Rat   > 4.6 mg/l air (Equivalent or similar to OECD 403, 4 h, Rat, Experimental va (dust))	ute Oral
(dust))	
	alue, Inhalation
ethyl acetate (141-78-6)	
LD50 oral rat 10200 mg/kg bodyweight (Equivalent or similar to OECD 401, Rat, Female, value, Oral, 14 day(s))	Experimental
LD50 oral 4934 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 401 (Ac Toxicity)	cute Oral
LD50 dermal rabbit > 20000 mg/kg bodyweight Animal: rabbit, Animal sex: male	
1,4-dihydroxybenzene; hydroquinone; quinol (123-31-9)	
LD50 oral rat > 375 mg/kg bodyweight (OECD 401: Acute Oral Toxicity, Rat, Male / fema Experimental value, Oral, 14 day(s))	le,
LD50 dermal rabbit > 2000 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 402 (A Toxicity), Guideline: EU Method B.3 (Acute Toxicity (Dermal))	Acute Dermal
styrene (100-42-5)	
LD50 oral rat 5000 mg/kg bodyweight (Rat, Male / female, Experimental value, Oral, 14 d	lay(s))
LD50 dermal rat > 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Act Toxicity)	ute Dermal
LC50 Inhalation - Rat 11.8 mg/l (4 h, Rat, Inconclusive, insufficient data, Inhalation (vapours))	
Calcium carbonate (1317-65-3)	
LD50 oral rat 6450 mg/kg (Rat, Literature study, Oral)	
silicon dioxide, amorphous (7631-86-9)	
LD50 oral rat > 10000 mg/kg (Rat, Oral)	
LD50 dermal rabbit > 5000 mg/kg (Rabbit, Dermal)	
glass, oxide, chemicals (65997-17-3)	
LD50 oral rat > 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 423 (Acu - Acute Toxic Class Method)	ute Oral toxicity
magnesium carbonate (546-93-0)	
LD50 oral rat > 2000 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECI 420 (Acute Oral Toxicity - Fixed Dose Method), Guideline: EU Method B.1 toxicity - Fixed Dose Procedure)	
Skin corrosion/irritation : Causes skin irritation. Serious eye damage/irritation : Causes serious eye irritation.	
Respiratory or skin sensitisation : Not classified Germ cell mutagenicity : Not classified Carcinogenicity : Not classified	
Germ cell mutagenicity : Not classified	

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styrene (100-42-5)	
IARC group	2B - Possibly carcinogenic to humans
Reproductive toxicity :	Suspected of damaging the unborn child.
STOT-single exposure :	Not classified
ethyl acetate (141-78-6)	
STOT-single exposure	May cause drowsiness or dizziness.
styrene (100-42-5)	
STOT-single exposure	May cause respiratory irritation.
STOT-repeated exposure :	Causes damage to organs (hearing organs) through prolonged or repeated exposure (inhalation).
ethyl acetate (141-78-6)	
LOAEL (oral, rat, 90 days)	3600 mg/kg bodyweight Animal: rat, Guideline: EPA OTS 795.2600 (Subchronic Oral Toxicity Test)
NOAEL (oral, rat, 90 days)	900 mg/kg bodyweight Animal: rat, Guideline: EPA OTS 795.2600 (Subchronic Oral Toxicity Test)
styrene (100-42-5)	
LOAEL (oral, rat, 90 days)	2000 mg/kg bodyweight Animal: rat
LOAEC (inhalation, rat, vapour, 90 days)	0.21 mg/l air Animal: rat, Guideline: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies)
NOAEL (oral, rat, 90 days)	1000 mg/kg bodyweight Animal: rat
NOAEL (subchronic, oral, animal/male, 90 days)	10 mg/kg bodyweight Animal: mouse, Animal sex: male
STOT-repeated exposure	Causes damage to organs (hearing sense) through prolonged or repeated exposure (if inhaled).
Aspiration hazard :	Not classified
SMC CARBON FIBRE REINFORCED FILLER -	BLACK
Viscosity, kinematic	> 20.5 mm²/s

# 11.2. Information on other hazards

No additional information available

# **SECTION 12: Ecological information**

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Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse

effects in the environment.

Hazardous to the aquatic environment, short-term

(acute)

: Not classified

Hazardous to the aquatic environment, long-term : Not classified

(chronic)

EC50 72h - Algae [1]

1,4-dihydroxybenzene; hydroquinone; quinol (123-31-9)	
LC50 - Fish [1]	0.638 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)
EC50 - Crustacea [1]	0.134 mg/l Test organisms (species): Daphnia magna
EC50 - Crustacea [2]	0.061 mg/l Test organisms (species): Daphnia magna

0.335 mg/l (Daphnia magna, 72h)

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1,4-dihydroxybenzene; hydroquinone; quinol (123-31-9)		
ErC50 algae	0.33 mg/l (Equivalent or similar to OECD 201, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, Growth rate)	
styrene (100-42-5)		
LC50 - Fish [1]	10 mg/l Test organisms (species): Pimephales promelas	
EC50 - Crustacea [1]	4.7 mg/l Test organisms (species): Daphnia magna	
EC50 72h - Algae [1]	4.9 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)	
EC50 96h - Algae [1]	6.3 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)	
ErC50 algae	4.9 mg/l (EPA OTS 797.1050, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, Growth rate)	
LOEC (chronic)	2.06 mg/l Test organisms (species): Daphnia magna Duration: '21 d'	
NOEC (chronic)	1.01 mg/l Test organisms (species): Daphnia magna Duration: '21 d'	

# 12.2. Persistence and degradability

1,4-dihydroxybenzene; hydroquinone; quinol (123-31-9)		
Persistence and degradability	Readily biodegradable in the soil. Readily biodegradable in water.	
Biochemical oxygen demand (BOD)	0.48 – 1.1 g O <sub>2</sub> /g substance	
Chemical oxygen demand (COD)	1.83 g O₂/g substance	
ThOD	1.89 g O₂/g substance	
styrene (100-42-5)		
Persistence and degradability	Biodegradable in the soil. Readily biodegradable in water.	
Chemical oxygen demand (COD)	2.8 g O <sub>2</sub> /g substance	
ThOD	3.07 g O₂/g substance	
BOD (% of ThOD)	0.42 (Literature study)	

# 12.3. Bioaccumulative potential

1,4-dihydroxybenzene; hydroquinone; quinol (123-31-9)		
Bioconcentration factor (BCF REACH)	40	
Partition coefficient n-octanol/water (Log Pow)	0.59 (Experimental value, 20 - 25 °C)	
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).	
styrene (100-42-5)		
BCF - Fish [1]	74 (Calculated value)	
Partition coefficient n-octanol/water (Log Pow)	2.96 (Practical experience/observation, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 25 °C)	
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).	

# 12.4. Mobility in soil

1,4-dihydroxybenzene; hydroquinone; quinol (123-31-9)	
Surface tension	No data available in the literature

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1,4-dihydroxybenzene; hydroquinone; quinol (123-31-9)		
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	0.97 – 1.585 (log Koc, Estimated value)	
Ecology - soil	Highly mobile in soil.	
styrene (100-42-5)		
Surface tension	No data available in the literature	
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	2.55 (log Koc, Estimated value)	
Ecology - soil	Low potential for adsorption in soil.	

#### 12.5. Results of PBT and vPvB assessment

Component	
styrene (100-42-5)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
1,4-dihydroxybenzene; hydroquinone; quinol (123-31-9)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

# 12.6. Endocrine disrupting properties

No additional information available

#### 12.7. Other adverse effects

No additional information available

# **SECTION 13: Disposal considerations**

#### 13.1. Waste treatment methods

Regional legislation (waste) : Disposal must be done according to official regulations.

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

# **SECTION 14: Transport information**

In accordance with ADR / IMDG / IATA / ADN / RID

#### 14.1. UN number or ID number

UN-No. (ADR) : Not regulated UN-No. (IMDG) : Not regulated UN-No. (IATA) : Not regulated UN-No. (ADN) : Not regulated UN-No. (RID) : Not regulated UN-No. (RID) : Not regulated

#### 14.2. UN proper shipping name

Proper Shipping Name (ADR) : Not regulated Proper Shipping Name (IMDG) : Not regulated Proper Shipping Name (IATA) : Not regulated Proper Shipping Name (ADN) : Not regulated Proper Shipping Name (RID) : Not regulated

#### 14.3. Transport hazard class(es)

# ADR

Transport hazard class(es) (ADR) : Not regulated

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**IMDG** 

Transport hazard class(es) (IMDG) : Not regulated

IATA

Transport hazard class(es) (IATA) : Not regulated

ADN

Transport hazard class(es) (ADN) : Not regulated

RID

Transport hazard class(es) (RID) : Not regulated

# 14.4. Packing group

Packing group (ADR) : Not regulated Packing group (IMDG) : Not regulated Packing group (IATA) : Not regulated Packing group (ADN) : Not regulated Packing group (RID) : Not regulated

#### 14.5. Environmental hazards

Dangerous for the environment : No Marine pollutant : No

Other information : No supplementary information available

# 14.6. Special precautions for user

#### **Overland transport**

Not regulated

#### Transport by sea

Not regulated

#### Air transport

Not regulated

#### Inland waterway transport

Not regulated

#### Rail transport

Not regulated

# 14.7. Maritime transport in bulk according to IMO instruments

Not applicable

# **SECTION 15: Regulatory information**

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

# 15.1.1. EU-Regulations

EU restriction list (REACH Annex XVII)		
Reference code	Applicable on	Entry title or description
3(a)	styrene	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 2.1 to 2.4, 2.6 and 2.7, 2.8 types A and B, 2.9, 2.10, 2.12, 2.13 categories 1 and 2, 2.14 categories 1 and 2, 2.15 types A to F

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

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

Contains no substance subject to Regulation (EU) 2019/1148 of the European Parliament and of the Council of 20 June 2019 on the marketing and use of explosives precursors.

VOC content : 187 g/l

#### 15.1.2. National regulations

No additional information available

# 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

#### **SECTION 16: Other information**

Full text of H- and EUH	Full text of H- and EUH-statements:		
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4		
Acute Tox. 4 (Inhalation:vapour)	Acute toxicity (inhalation:vapour) Category 4		
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4		
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1		
Aquatic Chronic 3	Hazardous to the aquatic environment — Chronic Hazard, Category 3		
Asp. Tox. 1	Aspiration hazard, Category 1		
Carc. 2	Carcinogenicity, Category 2		
Eye Dam. 1	Serious eye damage/eye irritation, Category 1		
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2		
Flam. Liq. 3	Flammable liquids, Category 3		
H226	Flammable liquid and vapour.		
H302	Harmful if swallowed.		
H304	May be fatal if swallowed and enters airways.		
H315	Causes skin irritation.		
H317	May cause an allergic skin reaction.		
H318	Causes serious eye damage.		

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Full text of H- and EUH-statements:		
H319	Causes serious eye irritation.	
H332	Harmful if inhaled.	
H335	May cause respiratory irritation.	
H341	Suspected of causing genetic defects.	
H351	Suspected of causing cancer.	
H361	Suspected of damaging fertility or the unborn child.	
H361d	Suspected of damaging the unborn child.	
H372	Causes damage to organs through prolonged or repeated exposure.	
H400	Very toxic to aquatic life.	
H412	Harmful to aquatic life with long lasting effects.	
Muta. 2	Germ cell mutagenicity, Category 2	
Repr. 2	Reproductive toxicity, Category 2	
Skin Irrit. 2	Skin corrosion/irritation, Category 2	
Skin Sens. 1	Skin sensitisation, Category 1	
STOT RE 1	Specific target organ toxicity — Repeated exposure, Category 1	
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation	

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