ENVIROLUBE® HEAVY TCLP-SAFE

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878
Issue date: 02/06/2022 Version: 1.0

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

1.1. Product identifier

Product form : Mixture

Trade name : ENVIROLUBE® HEAVY TCLP-SAFE

Product group : Mixtures

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

1.2.1. Relevant identified uses

No additional information available

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Manufacturer

Whitmore
930 Whitmore Drive
75087 Rockwall, Texas
USA
T 1.972.771.1000
Regulatory@whitmores.com - www.whitmores.com

Distributor

Whitmore Europe Limited
Unit 9
Foster Avenue, Woodside Park Industrial Estate
Dunstable, Bedfordshire , LU5 5TA
United Kingdom
T +44 1707 379870
Regulatory@whitmores.com - www.whitmores.com

1.4. Emergency telephone number

Emergency number : For Chemical Emergency Call CHEMTREC 24hr/day 7days/week
Within USA and Canada: 1.800.424.9300
Outside USA and Canada: +1.703.527.3887
(collect calls accepted)

Country	Organisation/Company	Address	Emergency number	Comment
United Kingdom	National Poisons Information Service (Birmingham Centre) City Hospital	Dudley Road B18 7QH Birmingham	0344 892 0111	Only for healthcare professionals
United Kingdom	Chemtrec - United Kingdom	London	Local (City) +44 20 3807 3798	
United Kingdom	Chemtrec - United Kingdom		Local (National) +44 870 820 0418	

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Hazardous to the aquatic environment – Chronic Hazard, Category 2 H411

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

Adverse physicochemical, human health and environmental effects

To our knowledge, this product does not present any particular risk, provided it is handled in accordance with good occupational hygiene and safety practice.

2.2. Label elements

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

Hazard pictograms (CLP) :

GHS09

Signal word (CLP) : -

Hazard statements (CLP) : H411 - Toxic to aquatic life with long lasting effects.

Precautionary statements (CLP) : P273 - Avoid release to the environment.
P391 - Collect spillage.
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	
asphalt, oxidized (64742-93-4)	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
2,6-di-tert-butyl-p-cresol (128-37-0)	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
naphthalene (91-20-3)	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 at a concentration equal to or greater than 0,1 %

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
asphaltic bitumen, not cut back substance with national workplace exposure limit(s) (GB)	CAS-No.: 8052-42-4 EC-No.: 232-490-9	31.35 – 47.025	Not classified
asphalt, oxidized	CAS-No.: 64742-93-4 EC-No.: 265-196-4	15.675 – 31.35	Not classified
naphtha,heavy aromatic (Note H)	CAS-No.: 64742-94-5 EC-No.: 265-198-5 EC Index-No.: 649-424-00-3	> 15.543	Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
2,6-di-tert-butyl-p-cresol substance with national workplace exposure limit(s) (GB)	CAS-No.: 128-37-0 EC-No.: 204-881-4	0.97 – 0.99	Aquatic Acute 1, H400 Aquatic Chronic 1, H410
distillates (petroleum), hydrotreated heavy paraffinic (Note L)	CAS-No.: 64742-54-7 EC-No.: 265-157-1 EC Index-No.: 649-467-00-8	0.225 – 0.275	Not classified
naphthalene substance with a Community workplace exposure limit	CAS-No.: 91-20-3 EC-No.: 202-049-5 EC Index-No.: 601-052-00-2	< 0.00157	Acute Tox. 4 (Oral), H302 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

Note H : The classification and labelling shown for this substance applies to the hazardous property(ies) indicated by the hazard statement(s) in combination with the hazard class(es) and category(ies) shown. The requirements of Article 4 for manufacturers, importers or downstream users of this substance apply to all other hazard classes and categories. For hazard classes where the route of exposure or the nature of the effects leads to a differentiation of the classification of the hazard class, the manufacturer, importer or downstream user is required to consider the routes of exposure or the nature of the effects not already considered.

Note L: The harmonised classification as a carcinogen applies unless it can be shown that the substance contains less than 3 % of dimethyl sulphoxide extract as measured by IP 346 (“Determination of polycyclic aromatics in unused lubricating base oils and asphaltene free petroleum fractions – Dimethyl sulphoxide extraction refractive index method” Institute of Petroleum, London), in which case a classification in accordance with Title II of this Regulation shall be performed also for that hazard class.

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 after inhalation : Remove person to fresh air and keep comfortable for breathing.

First-aid measures after skin contact : Wash skin with plenty of water.

First-aid measures after eye contact : Rinse eyes with water as a precaution.

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

No additional information available

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.

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

6.1.1. For non-emergency personnel

Emergency procedures : Exercise caution. Spill area may be slippery.

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

Methods for cleaning up : Mechanically recover the product.

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. Wear personal protective equipment.

Hygiene measures : 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 in a well-ventilated place. Keep cool.

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

asphaltic bitumen, not cut back (8052-42-4)	
United Kingdom - Occupational Exposure Limits	
Local name	Asphalt
WEL TWA (OEL TWA) [1]	5 mg/m³ petroleum fumes
WEL STEL (OEL STEL)	10 mg/m³ petroleum fumes
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

naphthalene (91-20-3)	
EU - Indicative Occupational Exposure Limit (IOEL)	
Local name	Naphthalene
IOEL TWA	50 mg/m³
IOEL TWA [ppm]	10 ppm
Remark	(Year of adoption 2010)
Regulatory reference	COMMISSION DIRECTIVE 91/322/EEC; SCOEL Recommendations

2,6-di-tert-butyl-p-cresol (128-37-0)	
United Kingdom - Occupational Exposure Limits	
Local name	2,6-Di-tert-butyl-p-cresol

2,6-di-tert-butyl-p-cresol (128-37-0)	
WEL TWA (OEL TWA) [1]	10 mg/m³
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

No additional information available

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

8.2.2.1. Eye and face protection

Eye protection:

Wear eye protection

8.2.2.2. Skin protection

Skin and body protection:

Wear suitable protective clothing

Hand protection:

Neoprene or nitrile rubber gloves

Hand protection					
Type	Material	Permeation	Thickness (mm)	Penetration	Standard
Disposable gloves	Nitrile rubber (NBR), Neoprene rubber (HNBR)	2 (> 30 minutes)	0.3 - 0.6 mm		

8.2.2.3. Respiratory protection

Respiratory protection:

No respiratory protection needed under normal use conditions

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	: dark brown.
Appearance	: Grease.
Odour	: petroleum-like odour.
Odour threshold	: Not available
Melting point	: Not available
Freezing point	: Not applicable
Boiling point	: Not available
Flammability	: Non flammable.
Explosive limits	: Not applicable

Lower explosion limit	: Not applicable
Upper explosion limit	: Not applicable
Flash point	: Not applicable
Auto-ignition temperature	: Not applicable
Decomposition temperature	: Not available
pH	: Not available
pH solution	: Not available
Viscosity, kinematic	: 2034 mm²/s cSt @ 40°C
Solubility	: Material insoluble in water.
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: Not available
Vapour pressure at 50 °C	: Not available
Density	: Not available
Relative density	: Not available
Relative vapour density at 20 °C	: Not applicable
Particle size	: Not available
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

No additional information available

9.2.2. Other safety characteristics

No additional information available

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

asphalt, oxidized (64742-93-4)	
LD50 oral rat	> 5000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
LD50 dermal rabbit	> 2000 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
LC50 Inhalation - Rat	> 0.0944 mg/l air Animal: rat, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity)

naphtha,heavy aromatic (64742-94-5)	
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: other:EPA Fed Reg Vol 50, No. 188 1985 and as amended in Fed Reg Vol 52, No. 97, 1987
LD50 dermal rabbit	> 2000 mg/kg bodyweight Animal: rabbit, Guideline: EPA OTS 798.1100 (Acute Dermal Toxicity)
LD50 dermal	3160 mg/kg

distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)	
LD50 oral rat	> 5000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity), Guideline: OECD Guideline 420 (Acute Oral Toxicity - Fixed Dose Method)
LD50 dermal rabbit	> 5000 mg/kg Source: IUCLID
LC50 Inhalation - Rat	> 25 mg/l/4h

asphaltic bitumen, not cut back (8052-42-4)	
LD50 oral rat	> 5000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
LD50 dermal rabbit	> 2000 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
LC50 Inhalation - Rat	> 0.0944 mg/l air Animal: rat, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity)

naphthalene (91-20-3)	
LD50 oral rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
LD50 oral	490 mg/kg
LD50 dermal rat	> 2500 mg/kg (Rat, Dermal)
LD50 dermal rabbit	2500 mg/kg Source: ChemIDplus
LD50 dermal	2500 mg/kg
LC50 Inhalation - Rat	> 0.4 mg/l air Animal: rat, Guideline: other:EPA TSCA, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity), Guideline: EPA OPPTS 870.1300 (Acute inhalation toxicity)

2,6-di-tert-butyl-p-cresol (128-37-0)	
LD50 oral rat	> 2930 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
LD50 dermal rabbit	> 2000 mg/kg Source: ECHA
LC50 Inhalation - Rat (Dust/Mist)	> 2 mg/l

Skin corrosion/irritation : Not classified (Based on available data, the classification criteria are not met)

Serious eye damage/irritation : Not classified (Based on available data, the classification criteria are not met)

Respiratory or skin sensitisation : Not classified (Based on available data, the classification criteria are not met)

Germ cell mutagenicity : Not classified (Based on available data, the classification criteria are not met)

Carcinogenicity : Not classified (Based on available data, the classification criteria are not met)

asphalt, oxidized (64742-93-4)	
IARC group	2A - Probably carcinogenic to humans

asphaltic bitumen, not cut back (8052-42-4)	
IARC group	2B - Possibly carcinogenic to humans

naphthalene (91-20-3)	
IARC group	2B - Possibly carcinogenic to humans

2,6-di-tert-butyl-p-cresol (128-37-0)	
IARC group	3 - Not classifiable

2,6-di-tert-butyl-p-cresol (128-37-0)	
NOAEL (chronic, oral, animal/male, 2 years)	25 mg/kg bodyweight Animal: rat, Animal sex: male, Remarks on results: other:Effect type: toxicity (migrated information)

Reproductive toxicity : Not classified (Based on available data, the classification criteria are not met)

naphtha,heavy aromatic (64742-94-5)	
NOAEL (animal/male, F0/P)	35 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test), Guideline: other:OPPTS 870.3650 Combined Repeated Dose Toxicity Study with the Reproduction/Developmental Toxicity Screening Test
NOAEL (animal/female, F0/P)	125 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test), Guideline: other:OPPTS 870.3650 Combined Repeated Dose Toxicity Study with the Reproduction/Developmental Toxicity Screening Test

naphthalene (91-20-3)	
LOAEL (animal/female, F0/P)	50 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: other:OECD Guideline 414 (Prenatal Developmental Toxicity Study)
LOAEL (animal/female, F1)	450 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: other:OECD Guideline 414 (Prenatal Developmental Toxicity Study)
NOAEL (animal/female, F0/P)	120 mg/kg bodyweight Animal: rabbit, Animal sex: female, Guideline: other:OECD Guideline 414 (Prenatal Developmental Toxicity Study)

STOT-single exposure : Not classified (Based on available data, the classification criteria are not met)

STOT-repeated exposure : Not classified (Based on available data, the classification criteria are not met)

asphalt, oxidized (64742-93-4)	
LOAEC (inhalation, rat,dust/mist/fume, 90 days)	0.0207 mg/l air Animal: rat, Guideline: other:OECD 451

naphtha,heavy aromatic (64742-94-5)	
LOAEC (inhalation, rat, vapour, 90 days)	4.71 mg/l air Animal: rat, Guideline: EU Method B.29 (Sub-Chronic Inhalation Toxicity:90-Day Study)
NOAEC (inhalation, rat, vapour, 90 days)	2.355 mg/l air Animal: rat, Guideline: EU Method B.29 (Sub-Chronic Inhalation Toxicity:90-Day Study)

distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)	
LOAEL (oral, rat, 90 days)	125 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)

asphaltic bitumen, not cut back (8052-42-4)	
LOAEC (inhalation, rat,dust/mist/fume, 90 days)	0.0207 mg/l air Animal: rat, Guideline: other:OECD 451

naphthalene (91-20-3)	
LOAEL (oral, rat, 90 days)	400 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)
LOAEC (inhalation, rat, vapour, 90 days)	0.011 mg/l air Animal: rat, Guideline: EPA OPP 82-4 (90-Day Inhalation Toxicity), Guideline: OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day Study)
NOAEL (dermal, rat/rabbit, 90 days)	1000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 411 (Subchronic Dermal Toxicity: 90-Day Study)

2,6-di-tert-butyl-p-cresol (128-37-0)	
LOAEL (oral, rat, 90 days)	100 mg/kg bodyweight Animal: rat, Animal sex: male
NOAEL (oral, rat, 90 days)	25 mg/kg bodyweight Animal: rat, Animal sex: male

Aspiration hazard : Not classified (Based on available data, the classification criteria are not met)

ENVIROLUBE® HEAVY TCLP-SAFE	
Viscosity, kinematic	2034 mm²/s cSt @ 40°C

11.2. Information on other hazards

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

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 (chronic) : Toxic to aquatic life with long lasting effects.

Not rapidly degradable

naphtha,heavy aromatic (64742-94-5)	
LC50 - Fish [1]	6.1 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)
LC50 - Fish [2]	0.58 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)
EC50 - Crustacea [1]	0.95 mg/l
EC50 - Crustacea [2]	0.76 mg/l Test organisms (species): Daphnia magna

distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)	
LC50 - Fish [1]	> 5000 mg/l
EC50 - Crustacea [1]	> 1000 mg/l Source: IUCLID
EC50 96h - Algae [1]	> 1000 mg/l Source: IUCLID

naphthalene (91-20-3)	
LC50 - Fish [1]	0.77 mg/l
EC50 - Crustacea [1]	2.16 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	0.4 mg/l (Skeletonema costatum, Literature study, Growth rate)
NOEC (chronic)	0.59 mg/l Test organisms (species): Daphnia pulex Duration: '125 d'
NOEC chronic fish	≈ 0.37 mg/l Test organisms (species): Oncorhynchus kisutch Duration: '40 d'

2,6-di-tert-butyl-p-cresol (128-37-0)	
LC50 - Fish [1]	> 0.57 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)
EC50 - Crustacea [1]	0.84 mg/l
EC50 72h - Algae [1]	> 0.4 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)
LOEC (chronic)	1 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC (chronic)	0.023 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC chronic fish	0.053 mg/l

12.2. Persistence and degradability

asphalt, oxidized (64742-93-4)	
Persistence and degradability	Not readily biodegradable in water.

naphtha,heavy aromatic (64742-94-5)	
Persistence and degradability	Not readily biodegradable in water.

asphaltic bitumen, not cut back (8052-42-4)	
Persistence and degradability	Not readily biodegradable in water.

naphthalene (91-20-3)	
Persistence and degradability	Biodegradable in the soil; Readily biodegradable in water.
Biochemical oxygen demand (BOD)	0 g O_2/g substance
Chemical oxygen demand (COD)	0.22 g O_2/g substance
ThOD	2.99 g O_2/g substance

2,6-di-tert-butyl-p-cresol (128-37-0)	
Persistence and degradability	Biodegradable in the soil. Not readily biodegradable in water.
Biochemical oxygen demand (BOD)	0.51 g O_2/g substance
Chemical oxygen demand (COD)	2.27 g O_2/g substance
ThOD	2.977 g O_2/g substance

12.3. Bioaccumulative potential

asphalt, oxidized (64742-93-4)	
Partition coefficient n-octanol/water (Log Pow)	> 6 Source: IUCLID
Bioaccumulative potential	No bioaccumulation data available.

naphtha,heavy aromatic (64742-94-5)	
Partition coefficient n-octanol/water (Log Pow)	2.9 – 6.1

distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)	
Partition coefficient n-octanol/water (Log Pow)	3.9 – 6 Source: IUCLID

asphaltic bitumen, not cut back (8052-42-4)	
Partition coefficient n-octanol/water (Log Pow)	> 6 (Calculated)
Bioaccumulative potential	Not bioaccumulative.

naphthalene (91-20-3)	
BCF - Fish [1]	23 – 168 (8 week(s), Cyprinus carpio, Literature study)
Partition coefficient n-octanol/water (Log Pow)	3.3 (Experimental value)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

2,6-di-tert-butyl-p-cresol (128-37-0)	
BCF - Fish [1]	230 – 2500 (OECD 305: Bioconcentration: Flow-Through Fish Test, 56 day(s), Cyprinus carpio, Flow-through system, Fresh water, Experimental value)
Partition coefficient n-octanol/water (Log Pow)	4.17 (Experimental value, 37 °C)
Bioaccumulative potential	Potential for bioaccumulation (4 ≥ Log Kow ≤ 5).

12.4. Mobility in soil

asphalt, oxidized (64742-93-4)	
Ecology - soil	Low potential for mobility in soil.

naphthalene (91-20-3)	
Surface tension	0.03 N/m (100 °C)
Ecology - soil	Adsorbs into the soil.

2,6-di-tert-butyl-p-cresol (128-37-0)	
Surface tension	No data available (test not performed)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	4.362 (log Koc, SRC PCKOCWIN v1.66, Calculated value)
Ecology - soil	Low potential for mobility in soil. May be harmful to plant growth, blooming and fruit formation.

12.5. Results of PBT and vPvB assessment

No additional information available

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

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

ADR	IMDG	IATA	ADN	RID
14.1. UN number or ID number				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.2. UN proper shipping name				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.3. Transport hazard class(es)				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.4. Packing group				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.5. Environmental hazards				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
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

Contains no REACH substances with Annex XVII restrictions

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) No 1005/2009 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 September 2009 on substances that deplete the ozone layer.

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.

Contains no substance subject to Regulation (EC) 273/2004 of the European Parliament and of the Council of 11 February 2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances.

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

Abbreviations and acronyms:	
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
COD	Chemical oxygen demand (COD)
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number
EC50	Median effective concentration
EN	European Standard
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
VOC	Volatile Organic Compounds
CAS-No.	Chemical Abstract Service number
N.O.S.	Not Otherwise Specified
vPvB	Very Persistent and Very Bioaccumulative
ED	Endocrine disrupting properties

Full text of H- and EUH-statements:	
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Acute 1	Hazardous to the aquatic environment – Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment – Chronic Hazard, Category 1
Asp. Tox. 1	Aspiration hazard, Category 1
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.

Full text of H- and EUH-statements:	
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.

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.