EOLYS POWERFLEX® Additive

Safety Data Sheet

According to REACH Regulation (EC) No 1907/2006, as retained and amended in UK law.
Product Reference code:S9678033680
Issue date: 8/22/2024 Version: 1.00

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

1.1. Product identifier

Product form	:	Mixture
Synonyms	:	EOLYS POWERFLEX® Additiv Additif EOLYS POWERFLEX® EOLYS POWERFLEX® Additive
Product code	:	S9678033680
Product group	:	Others

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

1.2.1. Relevant identified uses

Main use category	:	Professional use
Use of the substance/mixture	:	Use in automotive applications
Function or use category	:	Fuel additives and fuel components

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of product safety information sheet

Name	Stellantis Auto SAS
	2-10 bd de l'Europe 78300 Poissy
Inquiry office	
	IFZ Ingenieurbüro und Consulting GmbH
E-mail	OPEL-helpdesk@ifz-berlin.de
Telephone:	+49 30 / 2904897-10

1.4. Emergency telephone number

Emergency number	+49 61 31 19240 United Kingdom +44 870 600 626 / 0870 600 6266

Further information
Apply safety data sheet to the following products:

Part-No.	Catalogue-No.	amount
9678033680	-	1.1 L
9678033780	-	1.7 L
9678033980	-	1.1 L
9678034080	-	1.7 L
9678080680	-	2.2 L
9678081080	-	1.6 L
9678101480	-	1.75 L
9678101680	-	2.4 L

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to GB CLP (SI 2019:720 as amended)

Not classified

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to GB CLP (SI 2019:720 as amended)

Precautionary statements (GB CLP) : P280 - Wear protective gloves, protective clothing, eye protection, face protection.
P501 - Dispose of contents and container to a hazardous or special waste collection point, in accordance with local, regional, national and international regulations.

EUH-statements (GB CLP) : EUH066 - Repeated exposure may cause skin dryness or cracking.
EUH210 - Safety data sheet available on request.

2.3. Other hazards

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

Component	
2-ethylhexan-1-ol (104-76-7)	This product does not contain substances at ≥0.1% that meet the PBT criteria of UK REACH regulation, annex XIII This product does not contain substances at ≥0.1% that meet the vPvB criteria of UK REACH regulation, annex XIII
iron organic compound (865812-80-2)	This product does not contain substances at ≥0.1% that meet the PBT criteria of UK REACH regulation, annex XIII This product does not contain substances at ≥0.1% that meet the vPvB criteria of UK REACH regulation, annex XIII
hydrocarbons, C11-C13, isoalkanes, <2% aromatics (90622-58-5)	This product does not contain substances at ≥0.1% that meet the PBT criteria of UK REACH regulation, annex XIII This product does not contain substances at ≥0.1% that meet the vPvB criteria of UK REACH regulation, annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of UK REACH for having endocrine disrupting properties, or substance(s) are not identified as having endocrine disrupting properties in accordance with the criteria set out in GB BPR and GB PPP at a concentration equal to or greater than 0,1 %

Component	
hydrocarbons, C11-C13, isoalkanes, <2% aromatics(90622-58-5)	The substance is not included in the list established in accordance with Article 59(1) of UK REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in GB BPR and GB PPP

Component	
iron organic compound(865812-80-2)	The substance is not included in the list established in accordance with Article 59(1) of UK REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in GB BPR and GB PPP
2-ethylhexan-1-ol(104-76-7)	The substance is not included in the list established in accordance with Article 59(1) of UK REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in GB BPR and GB PPP

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Comments : Blend based on : Isoalkanes, iron organic compound

Name	Product identifier	%	Labelling according to GB CLP (SI 2019:720 as amended)
hydrocarbons, C11-C13, isoalkanes, <2% aromatics	CAS-No.: 90622-58-5 EC-No.: 292-460-6	45 – 50	Asp. Tox. 1, H304 EUH066
iron organic compound	CAS-No.: 865812-80-2 EC-No.: 476-890-3	10 – 15	Not classified
2-ethylhexan-1-ol	CAS-No.: 104-76-7 EC-No.: 203-234-3	5 – 10	Acute Tox. 4 (Inhalation), H332 (ATE=11 mg/l/4h) Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335

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 you feel unwell, seek medical advice. Show this safety data sheet to the doctor in attendance. Protection is needed for the First Aider. If unconscious, place the person in the recovery position and seek medical advice immediately. Never give anything by mouth to an unconscious person. Eye wash fountains and safety showers must be easily accessible. Remove and wash contaminated clothing before re-use.

First-aid measures after inhalation : Move the affected person away from the contaminated area and into the fresh air. Lay the affected person down, and keep her or him warm and calm. If symptoms persist, call a physician.

First-aid measures after skin contact : Immediately remove contaminated clothing or footwear. After contact with skin, wash immediately with plenty of water and soap. If skin irritation persists, call a physician.

First-aid measures after eye contact : Rinse immediately and thoroughly, pulling the eyelids well away from the eye (5 - 10 minutes minimum). Remove contact lenses after the first 1 - 2 minutes and continue flushing. If eye irritation persists, consult a specialist.

First-aid measures after ingestion : If swallowed, seek medical advice immediately and show this container or label. Do not induce vomiting. If swallowed, rinse mouth with water (only if the person is conscious). Drink 1 or 2 glasses of water. Never give anything by mouth to an unconscious person. Do not leave affected person unattended. In the case of involuntary vomiting, make sure that the vomit can flow out unimpeded - place victim in recovery position. If swallowed or in the event of vomiting, risk of product entering the lungs.

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

Symptoms/effects after inhalation : Can be hazardous to the health in the event of vapour, fog, or smoke formation during use if these are inhaled. Inhalation may cause irritation (cough, short breathing, difficulty in breathing).

Symptoms/effects after skin contact : Drying out of the skin due to defatting. Repeated exposure may cause skin dryness or cracking.

Symptoms/effects after eye contact : Temporary irritation of the eyes possible.

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

Symptomatic treatment (decontamination and vital functions). If necessary, contact poison centre.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Carbon dioxide (CO_2), dry chemical powder, foam.

Unsuitable extinguishing media : High volume water jet.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Combustible liquid.

Explosion hazard : Risk of bursting if heated.

Hazardous decomposition products in case of fire : Hazardous decomposition products may be released during prolonged heating like smokes, carbon monoxide and dioxide. Iron oxide. Inhaling hazardous decomposing products can cause serious health damage.

5.3. Advice for firefighters

Precautionary measures fire : Keep product and empty container away from heat and sources of ignition. Avoid sparks. Cleaning cloths, paper or other materials that are used for absorption can become a potential fire hazard. Collect and safely dispose in closed, non-flammable containers after use.

Firefighting instructions : Move containers from fire area if it can be done without personal risk. On heating, there is a risk of bursting due to internal pressure build-up. Cool down the containers exposed to heat with a water spray. Cool to prevent reignition.

Protection during firefighting : In the event of fire and/or explosion, do not breathe in fumes. In the event of fire, wear self-contained breathing apparatus. (EN 133). Complete protective clothing. Clothing for firefighters which comply with the European norm EN 469 (including helmet, protective boots, protective gloves) provide a basic protection for accident with chemicals.

Other information : Contaminated extinguishing water and soil must be disposed of in accordance with official regulations.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Remove all sources of ignition. Provide adequate ventilation. Avoid contact with skin and eyes. Do not breathe in vapours. Wear personal protective equipment. Suitable protective equipment: Safety glasses, boots, impervious gloves. In case of insufficient ventilation, wear suitable respiratory equipment. Higher exposure: Wear self-contained breathing apparatus and chemical protective suit at all times (EN 133). Avoid contact with hot surfaces. Keep away from sparks and flames.

6.1.1. For non-emergency personnel

No additional information available

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

Prevent product from entering drains. Do not contaminate surface water. Do not allow uncontrolled discharge of product into the environment.

6.3. Methods and material for containment and cleaning up

For containment : The product is combustible. Entry into rivers or surface water is to be prevented by the erection of barriers made of sand or earth or by other suitable barriers.

Methods for cleaning up : Seal discharge point, if possible without danger. Use a spark-free tool. Ventilate spillage area. Soak up with inert absorbent material. Spilled or leaking material is to be soaked up with non-flammable absorbent materials (sand, soil, diatomaceous earth) and put in containers. In the event of large-scale leakage, pump into suitable and properly labeled containers. Keep in suitable, closed containers for disposal. Dispose of the material collected according to regulations. Then wash with plenty of water. Dispose of rinse water in accordance with local and national regulations.

Other information : Even small quantities must be disposed of as per regulations. Disposal in accordance with the official regulations. See section: 13.

6.4. Reference to other sections

See section 8. See also section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : Preparation may charge electrostatically: always use grounding wire when transferring from one container to another. Electrical equipment should be protected to the appropriate standard.

Precautions for safe handling : Take necessary action to avoid static electricity discharge. Use only explosion-free electrical equipment with earth. Keep away from open flames, hot surfaces, and sources of ignition. Articles impregnated with the product are to be disposed of immediately (cloth, paper, absorbent material). Ensure adequate ventilation. Do not breathe in vapours and mist. Avoid contact with skin and eyes. Avoid high temperatures. Use personal protective equipment. When handling the product, follow hygiene and safety precautions.

Hygiene measures	:	It is good practice in industrial hygiene to avoid contact with solvents by using appropriate protective measures whenever possible. Do not eat, drink, smoke or take snuff at work. Wash hands before breaks and at the end of the workday. Contaminated work clothing should not be allowed out of the workplace. Use only clean equipment. Regular cleaning of equipment, work area and clothing. Eye wash fountains and safety showers must be easily accessible.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures	:	Take all necessary technical measures to avoid or minimize the release of the product on the workplace.
Storage conditions	:	Product must only be kept in the original packaging. Keep containers tightly closed in a dry, cool, and well-ventilated place. Avoid contamination with incompatible materials.
Incompatible products	:	Keep away from : acids and bases, alkalies, reducing agents.
Incompatible materials	:	Natural rubber.
Maximum storage period	:	60 months
Heat and ignition sources	:	Protect from heat and direct sunlight. Keep away from open flames, hot surfaces and sources of ignition. Avoid sparks and static charges.
Information on mixed storage	:	Store away from strong oxidizers, strong bases, strong acids. Do not store together with edibles.
Storage area	:	Handle, store and transport in compliance with local regulations and in labelled containers that are suitable for this product. Smoking in the storage rooms is forbidden.
Packaging materials	:	Stainless steel preferred for storage. Teflon (R). Only use hydrocarbon-resistant containers.

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

2-ethylhexan-1-ol (104-76-7)	
United Kingdom - Occupational Exposure Limits	
Local name	2-ethylhexan-1-ol
WEL TWA (OEL TWA)	5.4 mg/m³
	1 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

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:
Follow the maximum workplace concentration values. Ensure adequate ventilation, especially in confined areas. Provide appropriate exhaust ventilation at places of dust forming. Local exhaust.

8.2.2. Personal protection equipment

Personal protective equipment - Report preview:
Personal protection equipment should comply with the relevant standards, be suitable for purpose, in good condition and maintained as specified. Eye wash fountains and safety showers must be easily accessible.

Personal protective equipment symbol(s):

8.2.2.1. Eye and face protection

Eye protection - Report preview:
In case of risk of splashing, wear protective glasses. Wear closed safety glasses (EN 166)

8.2.2.2. Skin protection

Skin and body protection - Report preview:
Wear suitable protective clothing. Long sleeved clothing. Personal protective equipment should be chosen according to the CEN standards and in discussion with the supplier of the protective equipment. Remove and wash contaminated clothing before re-use.

Hand protection - Report preview:
Avoid bringing product in contact with the skin. Wear protective gloves. Use tested protective gloves. Chemically resistant protective gloves (according to European standard EN 374 or equivalent). The breakthrough time must be greater than the useful life of the product. Safety gloves should be selected for the actual conditions of use and in accordance with the instructions for use provided by the manufacturer. Please note that the daily use of a chemical glove in practice may be considerably shorter than the permeation time calculated in EN 374 as a result of many different factors (for example temperature). Protective gloves should be replaced immediately if damaged or in case of signs of wear. Preventive skin protection: Protection cream can help to protect the skin surface. It should be applied before use.

8.2.2.3. Respiratory protection

Respiratory protection - Report preview:
In case of insufficient ventilation, wear suitable respiratory equipment. Breathing apparatus with filter: Approved organic vapour respirator. Higher exposure: Wear self-contained breathing apparatus and chemical protective suit at all times. The respiratory protective equipment should be selected considering the local working conditions

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:
Emission from ventilation and process equipment should be tested to make sure that it fulfils the requirements of environmental protection regulation. Prevent product from entering drains.

Other information:
Prevent product from entering drains.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Colour	:	Brown.
Odour	:	hydrocarbon-like.
Odour threshold	:	Not available
Melting point	:	Not available
Freezing point	:	Not available
Boiling point	:	185 – 213 °C (solvent)
Flammability	:	Not available
Explosive limits	:	Not available
Flash point	:	60 – 64 °C
Auto-ignition temperature	:	255 °C
Decomposition temperature	:	Not available
pH	:	Not applicable. (Insoluble in water)
Viscosity, kinematic	:	28.45 mm²/s (at 40 °C)
Solubility	:	Water: 0.13 mg/l (at 20 °C)/(iron organic compound)
Partition coefficient n-octanol/water (Log Kow)	:	Not available
Vapour pressure	:	2 hPa (at 30 °C)/(solubilizers)
Vapour pressure at 50°C	:	Not available
Density	:	0.89 g/cm³ (at 20 °C)
Relative density	:	Not available
Relative vapour density at 20°C	:	Not available
Relative density of saturated gas/air mixture	:	> 1 (solubilizers)
Particle characteristics	:	Not applicable

iron organic compound (865812-80-2)	
Boiling point	> 400 °C Atm. press.: 1013 hPa Decomposition: 'yes' Decomp. temp.: 265 °C
Vapour pressure	≈ 0.00001 Pa Temp.: 25 °C
Particle size distribution	1.62 – 3.78 nm [d 10]
Particle shape	Spherical
Particle specific surface area	209.7 – 502.1 m2/g

hydrocarbons, C11-C13, isoalkanes, <2% aromatics (90622-58-5)	
Boiling point	189 – 206 °C Atm. press.: 1 atm Decomposition: 'no'
Flash point	67 °C Atm. press.: 1 atm
Vapour pressure	0.04 kPa Temp.: 20 °C

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

VOC content	:	DIRECTIVE 2004/42/CE Annex II: No data available
Other properties	:	This product contains Nanoform (iron organic compound). Crystallinity: amorphous. Surface functionalisation/treatment: No
Additional information	:	Mechanical sensitivity. (Sensitivity to impact):. Negative

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under proper storage and handling.

10.2. Chemical stability

Stable at room temperature.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Keep away from heat. Keep away from open flames, hot surfaces, and sources of ignition. Avoid sparks and static charges. Avoid contamination with incompatible materials.

10.5. Incompatible materials

Incompatible with: strong oxidising agents, mineral acids. Keep away from reducing agents/(strong) acids /(strong) bases.

10.6. Hazardous decomposition products

The pyrolysis is heavily depending on external conditions. Thermal decomposition generates : Carbon oxides (CO, CO2), iron oxide. See also section 5.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

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

2-ethylhexan-1-ol (104-76-7)	
LD50 oral rat	≈ 2047 mg/kg bodyweight (OECD 401 method)
LC50 Inhalation - Rat	0.89 – 5.3 mg/l air (OECD 403 method)

iron organic compound (865812-80-2)	
LD50 oral rat	> 2000 mg/kg bodyweight female - (OECD 423 method)
LD50 dermal rat	> 2000 mg/kg bodyweight (OECD 402 method)

hydrocarbons, C11-C13, isoalkanes, <2% aromatics (90622-58-5)	
LD50 oral rat	> 5000 mg/kg bodyweight (OECD 401 method)
LD50 dermal rabbit	2200 – 2500 mg/kg bodyweight
LC50 Inhalation - Rat (Vapours)	4951 mg/l/4h (OECD 403 method)

Skin corrosion/irritation : Not classified
pH: Not applicable. (Insoluble in water)

Serious eye damage/irritation : Not classified
pH: Not applicable. (Insoluble in water)

Respiratory or skin sensitisation : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

STOT-single exposure : Not classified

2-ethylhexan-1-ol (104-76-7)	
STOT-single exposure	May cause respiratory irritation.

STOT-repeated exposure : Not classified

2-ethylhexan-1-ol (104-76-7)	
NOAEL (oral, rat, 90 days)	250 mg/kg bodyweight (OECD 408 method)
NOAEC (inhalation, rat, gas, 90 days)	120 ppm (OECD 413 method)

hydrocarbons, C11-C13, isoalkanes, <2% aromatics (90622-58-5)	
NOAEL (oral, rat, 90 days)	> 1000 mg/kg bodyweight (OECD 408 method)
NOAEC (inhalation, rat, vapour, 90 days)	> 10.4 mg/l air (OECD 413 method)

Aspiration hazard : Not classified

EOLYS POWERFLEX® Additive	
Viscosity, kinematic	28.45 mm²/s (at 40 °C)

hydrocarbons, C11-C13, isoalkanes, <2% aromatics (90622-58-5)	
Viscosity, kinematic	1.77 mm²/s Temp.: '20°C' Parameter: 'kinematic viscosity (in mm²/s)'

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

No additional information available

11.2.2. Other information

Potential adverse human health effects and symptoms	:	At high temperatures, vapours can form in concentrations which can be hazardous to health,Inhalation may cause irritation (cough, short breathing, difficulty in breathing)
Experience with humans	:	Drying out of the skin due to defatting,Repeated or prolonged exposure may cause skin irritation and dermatitis, due to degreasing properties of the product,Temporary irritation of the eyes possible.
Other information	:	Repeated exposure may cause skin dryness or cracking.

SECTION 12: Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, short–term (acute)	:	Not classified
Hazardous to the aquatic environment, long–term (chronic)	:	Not classified

2-ethylhexan-1-ol (104-76-7)	
LC50 - Fish [1]	28.2 mg/l Pimephales promelas - (OECD 203 method)
LC50 - Fish [2]	17.1 mg/l Carp (Leuciscus idus melanotus) - (Test method EU C.1)
EC50 - Crustacea [1]	39 mg/l Daphnia magna (Water flea) - (Test method EU C.2)
EC50 72h - Algae [1]	11.5 mg/l Desmodesmus subspicatus - (Test method EU C.3)
EC50 72h - Algae [2]	16.6 mg/l Desmodesmus subspicatus - (Test method EU C.3)

iron organic compound (865812-80-2)	
LC50 - Fish [1]	> 100 mg/l Oncorhynchus mykiss (Rainbow trout) - (OECD 203 method)
EC50 - Crustacea [1]	> 100 mg/l Daphnia magna (Water flea) - (OECD 202 method)
EC50 - Other aquatic organisms [1]	> 1000 mg/l (3 h) - Activated sludge (Respiration inhibition) - (OECD 209 method)
EC50 72h - Algae [1]	> 100 mg/l Pseudokirchneriella subcapitata - (OECD 201 method)
EC50 96h - Algae [1]	> 100 mg/l Pseudokirchneriella subcapitata - (OECD 201 method)
NOEC (chronic)	≥ 1000 mg/l (3 h) - Activated sludge (Respiration inhibition) - (OECD 209 method)
NOEC chronic fish	≥ 100 mg/l Oncorhynchus mykiss (Rainbow trout) - (OECD 215 method)
NOEC chronic crustacea	≥ 100 mg/l Daphnia magna (Water flea) - (OECD 211 method)
NOEC chronic algae	≥ 100 mg/l Pseudokirchneriella subcapitata - (OECD 201 method)

hydrocarbons, C11-C13, isoalkanes, <2% aromatics (90622-58-5)	
LC50 - Fish [1]	> 1000 mg/l Oncorhynchus mykiss (Rainbow trout) - (OECD 203 method)
EC50 - Crustacea [1]	> 1000 mg/l Daphnia magna (Water flea) - (OECD 202 method)
EC50 72h - Algae [1]	> 1000 mg/l Raphidocelis subcapitata - (OECD 201 method)

12.2. Persistence and degradability

EOLYS POWERFLEX® Additive	
Persistence and degradability	Rapidly degradable

2-ethylhexan-1-ol (104-76-7)	
Persistence and degradability	Readily biodegradable.
Biodegradation	100 % (14 d) - (OECD 301C method)

iron organic compound (865812-80-2)	
Persistence and degradability	Not readily biodegradable.
Biodegradation	50 % (28 d) - (OECD 301B method)

hydrocarbons, C11-C13, isoalkanes, <2% aromatics (90622-58-5)	
Persistence and degradability	Readily biodegradable.
Biodegradation	89.8 % (28 d) - (OECD 301F method)

12.3. Bioaccumulative potential

2-ethylhexan-1-ol (104-76-7)	
Bioconcentration factor (BCF REACH)	38.06 (Quantitative structure-activity relationship (QSAR))/(US EPA EPI SuiteTM 4.11 module BCFBAF v. 3.01)
Partition coefficient n-octanol/water (Log Pow)	2.9 (OECD 117 method)
Bioaccumulative potential	Low bioaccumulation potential.

iron organic compound (865812-80-2)	
Partition coefficient n-octanol/water (Log Pow)	6.3 (OECD 117 method)

hydrocarbons, C11-C13, isoalkanes, <2% aromatics (90622-58-5)	
Bioconcentration factor (BCF REACH)	6.91 - 5 361.88 (Quantitative structure-activity relationship (QSAR))/(BCFBAF 3.01)
Partition coefficient n-octanol/water (Log Pow)	1.99 – 7.22 (Quantitative structure-activity relationship (QSAR))/(PETRORISK v7.04)

12.4. Mobility in soil

2-ethylhexan-1-ol (104-76-7)	
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	2.1177 (Quantitative structure-activity relationship (QSAR))/(US EPA EPI SuiteTM 4.11 module KOCWIN v. 2.00)

iron organic compound (865812-80-2)	
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	3.99 (Quantitative structure-activity relationship (QSAR))/(KOCWIN v2.00 (EPI Suite v4.1)

hydrocarbons, C11-C13, isoalkanes, <2% aromatics (90622-58-5)	
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1.71 – 5.95 (Quantitative structure-activity relationship (QSAR))/(PETRORISK v7.04)

12.5. Results of PBT and vPvB assessment

Component	
2-ethylhexan-1-ol (104-76-7)	This product does not contain substances at ≥0.1% that meet the PBT criteria of UK REACH regulation, annex XIII This product does not contain substances at ≥0.1% that meet the vPvB criteria of UK REACH regulation, annex XIII 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.
iron organic compound (865812-80-2)	This product does not contain substances at ≥0.1% that meet the PBT criteria of UK REACH regulation, annex XIII This product does not contain substances at ≥0.1% that meet the vPvB criteria of UK REACH regulation, annex XIII 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.
hydrocarbons, C11-C13, isoalkanes, <2% aromatics (90622-58-5)	This product does not contain substances at ≥0.1% that meet the PBT criteria of UK REACH regulation, annex XIII This product does not contain substances at ≥0.1% that meet the vPvB criteria of UK REACH regulation, annex XIII 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. Other adverse effects

No additional information available

12.7. Other adverse effects

Other adverse effects : No additional information available.

Additional information : Do not discharge the product into the environment. Do not allow material to contaminate ground water system. Do not flush into surface water or sanitary sewer system.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product/Packaging disposal recommendations : Disposal in accordance with the official regulations. Must be incinerated in a suitable incineration plant authorised under the Environmental Protection Act. The containers must be sealed, marked and disposed of safely. Should not be released into the environment. Packaging material: Completely empty the packaging prior to decontamination. Emtied containers can contain residues of product. Empty containers must be completely drained to the state of the art before being disposed of. Hantera och öppna behållare försiktigt. Packaging can be sent for recycling after being emptied and cleaned. If recycling is not possible, eliminate in accordance with local valid waste disposal regulations. Do not use unlabelled containers. Must not be disposed of with domestic waste. Even small quantities must be disposed of as per regulations.

Additional information : Waste code numbers are a recommendation, since the intended use by the consumer allows a final assignment.

European List of Waste (LoW, EC 2000/532) : 07 01 04* - other organic solvents, washing liquids and mother liquors
15 01 02 - plastic packaging

SECTION 14: Transport information

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

ADR	IMDG	IATA	ADN	RID
14.1. UN number				
Not regulated for transport				
not regulated	not regulated	not restricted	not regulated	not regulated
14.2. UN proper shipping name				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Transport document description				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.3. Transport hazard class(es)				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.4. Packing group				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental hazards				
Dangerous for the environment : No	Dangerous for the environment : No Marine pollutant: No	Dangerous for the environment : No	Dangerous for the environment : No	Dangerous for the environment : No
No supplementary information available				

14.6. Special precautions for user

Overland transport
No data available

Transport by sea
No data available

Air transport
No data available

Inland waterway transport
No data available

Rail transport
No data available

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

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

REACH Annex XVII (Restriction List)

EU restriction list (REACH Annex XVII)		
Reference code	**Applicable on**	**Entry title or description**
3(b)	2-ethylhexan-1-ol ; hydrocarbons, C11-C13, isoalkanes, <2% aromatics	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

Seveso Directive (Disaster Risk Reduction)

Seveso Additional information : Not subject to 2012/18/EU (SEVESO III)

PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

Dual-Use Regulation (428/2009)

Contains no substance subject to the COUNCIL REGULATION (EC) No 428/2009 of 5 May 2009 setting up a Community regime for the control of exports, transfer, brokering and transit of dual-use items.

VOC Directive (2004/42)

VOC content : DIRECTIVE 2004/42/CE Annex II: No data available

Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 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. United Kingdom

UK REACH Annex XIV (Authorisation List)

This product contains no substance(s) listed on UK REACH Annex XIV (Authorisation List) equal to or above the 0.1% level of disclosure

UK REACH Candidate List (SVHC)

Contains no substance(s) listed on the UK REACH Candidate List

15.2. Chemical safety assessment

No chemical safety assessment has been carried out for the substance or the mixture by the supplier.

SECTION 16: Other information

Abbreviations and acronyms:	
	ATE = Acute Toxicity Estimate
	DNEL = Derived No Effect Level
	PNEC = Predicted No-Effect Concentration
	NOEL = No Observed Effect Level
	NOEC = No-Observed-Effect-Concentration
	NOAEL = No Observed Adverse Effect Level
	LOAEL = Lowest Observed Adverse Effect Level
	SADT = Self-Accelerating decomposition temperature
	SVHC = substance of very high concern
	VOC = Volatile organic compounds
	IUCLID = International Uniform Chemical Information Database
	OECD = Organization for Economic Co-operation and Development
	RTECS = Registry of Toxic Effects of Chemical Substances
	RTECS = Registry of Toxic Effects of Chemical Substances
	REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
	GHS = Globally Harmonized System of Classification and Labelling of Chemicals

Abbreviations and acronyms:	
	CLP = Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
	EINECS = European Inventory of Existing Commercial Chemical Substances

Full text of H- and EUH-statements:	
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Asp. Tox. 1	Aspiration hazard, Category 1
EUH066	Repeated exposure may cause skin dryness or cracking.
EUH210	Safety data sheet available on request.
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation

Other information :

The information is based on present levels of our knowledge. It does not, however, give assurances of product properties and establishes no contract legal rights. The product is to be used exclusively for the applications named in the technical data sheet or in the processing instructions. Existing laws and regulations are the responsibility of the recipient of our products. The data of the hazardous ingredients were taken from the last relevant safety data sheet of the subcontractor.

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.