

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1 Product identifier**

- Trade name EOLYS POWERFLEX®

1.2 Relevant identified uses of the substance or mixture and uses advised against**Uses of the Substance/Mixture**

- Fuels and fuel additives

Uses advised against

- Reserved for industrial and professional use.

1.3 Details of the supplier of the safety data sheet**Company**

RHODIA OPERATIONS
Z.I. 26 rue Chef de Baie
17041 La Rochelle Cedex 1 - France
Tel : +33 (0)5.46.68.34.56

E-mail address

manager.sds@solvay.com

1.4 Emergency telephone number

+44(0)1235 239 670 [CareChem 24]

SECTION 2: Hazards identification**2.1 Classification of the substance or mixture****Classification (Regulation (EC) No 1272/2008)**

- The product is not classified as dangerous according to Regulation (EC) No. 1272/2008.

2.2 Label elements**Regulation (EC) No 1272/2008**

- The product is not classified as dangerous according to Regulation (EC) No. 1272/2008.

Additional Labeling

- EUH210 Safety data sheet available on request.

2.3 Other hazards which do not result in classification**Results of PBT and vPvB assessment**

- This mixture contains no substance considered to be persistent, bioaccumulating and toxic (PBT).
- This mixture contains no substance considered to be very persistent and very bioaccumulating (vPvB).

SECTION 3: Composition/information on ingredients**3.1 Substance**

- Not applicable, this product is a mixture.

3.2 Mixture

- Chemical nature mixture based on
- Isoparaffin solvent
Organic compound of Iron

Information on Components and Impurities

Chemical name	Identification number	Classification Regulation (EC) No 1272/2008	Concentration [%]
Hydrocarbons, C11-C13, isoalkanes, <2% aromatics	CAS-No. : 90622-58-5 List Number : 920-901-0 Registration number: 01-2119456810-40-xxxx self classification	Aspiration hazard, Category 1 ; H304	< 50
2-ethylhexan-1-ol	CAS-No. : 104-76-7 EINECS-No. : 203-234-3 self classification	Acute toxicity, Category 4 ; H332 Skin irritation, Category 2 ; H315 Eye irritation, Category 2 ; H319 Specific target organ toxicity - single exposure, Category 3 ; H335	< 10
Non-hazardous ingredients			
Iron organic compound	CAS-No. : 865812-80-2 EC-No. : 476-890-3 Registration number: 01-0000019934-60-0000 self classification	Not classified	<= 15

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: First aid measures**4.1 Description of first aid measures****General advice**

- Show this safety data sheet to the doctor in attendance.
- First aider needs to protect himself.
- Place affected clothing in a sealed bag for subsequent decontamination.

In case of inhalation

- If breathed in, move person into fresh air.
- If symptoms persist, call a physician.

In case of skin contact

- Take off contaminated clothing and shoes immediately.
- Wash immediately and thoroughly for a prolonged period (at least 15 minutes).
- Wash off with soap and plenty of water.
- Call a physician if irritation develops or persists.

In case of eye contact

- Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
- If eye irritation persists, consult a physician

In case of ingestion

- Do NOT induce vomiting.
- Vomiting may occur spontaneously
- Rinse mouth with water.
- Risk of product entering the lungs on vomiting after ingestion.
- Lay victim on side.
- Immediate medical attention is required.

4.2 Most important symptoms and effects, both acute and delayed

- no data available

4.3 Indication of any immediate medical attention and special treatment needed

- no data available

SECTION 5: Firefighting measures**5.1 Extinguishing media****Suitable extinguishing media**

- Foam
- powder
- Carbon dioxide (CO₂)

Unsuitable extinguishing media

- High volume water jet

5.2 Special hazards arising from the substance or mixture**Specific hazards during firefighting**

- Combustible liquid.
- Container may explode if heated.

Hazardous combustion products:

- Carbon oxides

5.3 Advice for firefighters**Special protective equipment for firefighters**

- Gloves
- Goggles
- Boots
- Full protective suit
- Self-contained breathing apparatus (EN 133)

Specific fire fighting methods

- Use a water spray to cool fully closed containers.

SECTION 6: Accidental release measures**6.1 Personal precautions, protective equipment and emergency procedures**

- Remove all sources of ignition.
- Avoid contact with the skin and the eyes.
- Ventilate the area.
- Do not breathe vapour.
- Personal protective equipment
- Self-contained breathing apparatus (EN 133)
- Safety glasses
- Boots

- Complete suit protecting against chemicals
- Impervious gloves
- Keep away from flames and hot surfaces.

6.2 Environmental precautions

- Prevent product from entering sewage system.

6.3 Methods and materials for containment and cleaning up

Recovery

- Soak up with inert absorbent material.
- Pump up the product into a spare container :- suitably labelled.
- Keep in suitable, closed containers for disposal.

Decontamination/cleaning

- Wash off with plenty of water.

Disposal

- Dispose of contents/ container to an approved incineration plant.

Methods for containment

- Dam up with sand or inert earth (do not use combustible materials).
- Stop leak if safe to do so.

6.4 Reference to other sections

- no data available

SECTION 7: Handling and storage

7.1 Precautions for safe handling

- Take measures to prevent the build up of electrostatic charge.
- To avoid ignition of vapours by static electricity discharge, all metal parts of the equipment must be grounded.
- Provide adequate ventilation.
- Avoid contact with skin and eyes.
- Avoid inhalation of vapour or mist.

Hygiene measures

- Ensure that eyewash stations and safety showers are close to the workstation location.
- Use clean, well-maintained personal protection equipment.
- Wash hands before breaks and at the end of workday.
- When using do not eat, drink or smoke.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures/Storage conditions

- Keep in a cool, well-ventilated place.
- Store away from heat.
- Keep away from open flames, hot surfaces and sources of ignition.
- Keep away from incompatible materials to be indicated by the manufacturer
- Keep away from: Acids, Alkalis and caustic products., Reducing materials.

Packaging material

Suitable material

- Stainless steel
- Teflon (R)
- Hydrocarbon resistant materials.

Unsuitable material

- rubbers.

7.3 Specific end use(s)

- no data available

SECTION 8: Exposure controls/personal protection**8.1 Control parameters**

- Contains no substances with occupational exposure limit values.

8.2 Exposure controls**Control measures****Engineering measures**

- Local exhaust
- Dust must be extracted directly at the point of origin.

Individual protection measures**Respiratory protection**

- Use a respirator with an approved filter if a risk assessment indicates this is necessary.
- Respirator with filter for organic vapour

Hand protection

- Where there is a risk of contact with hands, use appropriate gloves
- The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.
- Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.
- Gloves must be inspected prior to use.
- Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.

Skin and body protection

- Choose body protection according to the amount and concentration of the dangerous substance at the work place.
- Remove and wash contaminated clothing.
- Long sleeved clothing

Hygiene measures

- Ensure that eyewash stations and safety showers are close to the workstation location.
- Use clean, well-maintained personal protection equipment.
- Wash hands before breaks and at the end of workday.
- When using do not eat, drink or smoke.

Protective measures

- The protective equipment must be selected in accordance with current CEN standards and in cooperation with the supplier of the protective equipment.
- Selection of appropriate personal protective equipment should be based on an evaluation of the performance characteristics of the protective equipment relative to the task(s) to be performed, conditions present, duration of use, and the potential hazards and/or risks that may occur during use.

Environmental exposure controls

- Prevent product from entering sewage system.

SECTION 9: Physical and chemical properties**9.1 Information on basic physical and chemical properties**

<u>Appearance</u>	<u>Physical state:</u> liquid <u>Colour:</u> amber <u>Particle size:</u> < 10 nm
<u>Odour</u>	Hydrocarbons
<u>Odour Threshold</u>	no data available
<u>pH</u>	Not applicable insoluble product
<u>Melting point/freezing point</u>	no data available
<u>Initial boiling point and boiling range</u>	<u>Boiling point/boiling range:</u> 185 - 213 °C Solvent
<u>Flash point</u>	> 60 - 64 °C
<u>Evaporation rate (Butylacetate = 1)</u>	no data available
<u>Flammability (liquids)</u>	Combustible liquid.
<u>Flammability/Explosive limit</u>	no data available
<u>Auto-ignition temperature</u>	255 °C
<u>Vapour pressure</u>	2 hPa (30 °C) Solvent negligible Organic compound of Iron
<u>Vapour density</u>	> 1 (101 kPa) Solvent
<u>Density</u>	0.89 g/cm ³ (20 °C)
<u>Relative density</u>	no data available
<u>Solubility</u>	<u>Water solubility:</u> 0.13 mg/l (20 °C)Organic compound of Iron < 1 mg/l (20 °C)Solvent <u>Solubility in other solvents:</u> common organic solvents : soluble log Pow: 6.3 Organic compound of Iron
<u>Partition coefficient: n-octanol/water</u>	no data available, Solvent
<u>Decomposition temperature</u>	no data available
<u>Viscosity</u>	<u>Viscosity, kinematic</u> : 28.45 mm ² /s (40 °C)

<u>Explosive properties</u>	negative Mechanical sensitivity (shock)
<u>Oxidizing properties</u>	no data available

9.2 Other information

no data available

SECTION 10: Stability and reactivity**10.1 Reactivity**

- no data available

10.2 Chemical stability

- Stable at room temperature.

10.3 Possibility of hazardous reactions

- Hazardous polymerisation does not occur.

10.4 Conditions to avoid

- Keep away from flames and sparks.
- Keep away from heat and sources of ignition.
- Static electricity
- Electric arcs

10.5 Incompatible materials

- Strong acids and strong bases
- Strong oxidizing agents
- Mineral acids.

10.6 Hazardous decomposition products

- Carbon oxides

SECTION 11: Toxicological information**11.1 Information on toxicological effects****Acute toxicity****Acute oral toxicity**

According to the data on the components

Not classified as hazardous for acute oral toxicity according to GHS.
According to the classification criteria for mixtures.
Expert judgement

Acute inhalation toxicity

According to the data on the components

The product has a low acute toxicity
According to the classification criteria for mixtures.
Expert judgement

Acute dermal toxicity

According to the data on the components

Not classified as hazardous for acute dermal toxicity according to GHS.
According to the classification criteria for mixtures.
Expert judgement

Acute toxicity (other routes of administration)	no data available
<u>Skin corrosion/irritation</u>	According to the data on the components Mild skin irritation According to the classification criteria for mixtures. Expert judgement
<u>Serious eye damage/eye irritation</u>	According to the data on the components Not classified as irritating to eyes According to the classification criteria for mixtures. Expert judgement
<u>Respiratory or skin sensitisation</u>	According to the data on the components Does not cause skin sensitisation. According to the classification criteria for mixtures. Expert judgement
<u>Mutagenicity</u>	
Genotoxicity in vitro	According to the data on the components Product is not considered to be genotoxic According to the classification criteria for mixtures. Expert judgement
Genotoxicity in vivo	no data available
<u>Carcinogenicity</u>	no data available
<u>Toxicity for reproduction and development</u>	
Toxicity to reproduction/Fertility	According to the data on the components The product is not considered to affect fertility. According to the classification criteria for mixtures. Expert judgement
Developmental Toxicity/Teratogenicity	According to the data on the components The product is not considered to be toxic for development. The product is not considered to be teratogenic. According to the classification criteria for mixtures. Expert judgement

STOT**STOT - single exposure**

The substance or mixture is not classified as specific target organ toxicant, single exposure according to GHS criteria.
According to the classification criteria for mixtures.

STOT - repeated exposure

The substance or mixture is not classified as specific target organ toxicant, repeated exposure according to GHS criteria.
According to the classification criteria for mixtures.

According to the data on the components
No adverse effect has been observed in toxicity tests by repeated administration
Unpublished internal reports
Unpublished reports

Aspiration toxicity

According to the data on the components, No aspiration toxicity classification,
According to the classification criteria for mixtures., Expert judgement

SECTION 12: Ecological information**12.1 Toxicity****Aquatic Compartment****Acute toxicity to fish**

The product itself has not been tested.

Acute toxicity to daphnia and other aquatic invertebrates.

The product itself has not been tested.

Toxicity to aquatic plants

The product itself has not been tested.

Toxicity to microorganisms

The product itself has not been tested.

Chronic toxicity to fish

The product itself has not been tested.

Chronic toxicity to daphnia and other aquatic invertebrates.

The product itself has not been tested.

Chronic Toxicity to aquatic plants

The product itself has not been tested.

Terrestrial Compartment**Toxicity to soil dwelling organisms**

The product itself has not been tested.

Toxicity to terrestrial plants

The product itself has not been tested.

12.2 Persistence and degradability**Abiotic degradation**

Stability in waterHydrocarbons, C11-C13, isoalkanes,
<2% aromatics

Not applicable, Expert judgement

**Physical- and photo-chemical
elimination**

no data available

Biodegradation**Biodegradability**Hydrocarbons, C11-C13, isoalkanes,
<2% aromaticsReady biodegradability study:
Method: OECD Test Guideline 301 F
- 28 Days
The 10 day time window criterion is not fulfilled.
Inherently biodegradable.
O2 consumption
Inoculum: activated sludge
By analogy
Unpublished reports

2-ethylhexan-1-ol

Method: OECD Test Guideline 301C
Readily biodegradable
Published data

Iron organic compound

Ultimate aerobic biodegradability
Method: OECD Test Guideline 301 B
Not readily biodegradable.
By analogy
Unpublished internal reports**Degradability assessment**Conclusion is not possible due to incomplete or heterogeneous data on the
components**12.3 Bioaccumulative potential****Partition coefficient: n-octanol/water**

2-ethylhexan-1-ol

Not potentially bioaccumulable

Iron organic compound

Bioaccumulative potential

Bioconcentration factor (BCF)

no data available

12.4 Mobility in soil**Adsorption potential (Koc)**

2-ethylhexan-1-ol

Koc: 26
Calculation method

Iron organic compound

Koc: 159587.92
Log Koc: 5.2
Calculation method**Known distribution to
environmental compartments**

Product may be distributed into the various environmental compartments

- 12.5 Results of PBT and vPvB assessment** This mixture contains no substance considered to be persistent, bioaccumulating and toxic (PBT).
This mixture contains no substance considered to be very persistent and very bioaccumulating (vPvB).
- 12.6 Other adverse effects** no data available

Ecotoxicity assessment**Acute aquatic toxicity**

According to the data on the components
The product does not have any known adverse effects on the aquatic organisms tested
According to the classification criteria for mixtures.
Expert judgement

Chronic aquatic toxicity

According to the data on the components
Does not have any known long-term adverse effects on the aquatic organisms tested
According to the classification criteria for mixtures.
Expert judgement

SECTION 13: Disposal considerations**13.1 Waste treatment methods****Product Disposal**

- Must be incinerated in a suitable incineration plant holding a permit delivered by the competent authorities.

Advice on cleaning and disposal of packaging

- Carefully drain and then steam clean.
- May be reused following decontamination.
- Dispose of in accordance with local regulations.

SECTION 14: Transport information**ADR**

not regulated

RID

not regulated

IMDG

not regulated

IATA

not regulated

ADN/ADNR

not regulated

Note: The above regulatory prescriptions are those valid on the date of publication of this sheet. Given the possible evolution of transport regulations for hazardous materials, it would be advisable to check their validity with your sales office.

SECTION 15: Regulatory information**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

- According to our knowledge, no specific regulatory information.

15.2 Chemical safety assessment

- no data available

SECTION 16: Other information**Full text of H-Statements referred to under sections 2 and 3.**

- | | |
|--------|---|
| - 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. |

Further information

- Mixture in CLP Format

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. Such information is only given as a guidance to help the user handle, use, process, store, transport, dispose and release the product in satisfactory safety conditions and is not to be considered as a warranty or quality specification. It should be used in conjunction with technical sheets but do not replace them. Thus, the information only relates to the designated specific product and may not be applicable if such product is used in combination with other materials or in any other manufacturing process, unless otherwise specifically indicated. It does not release the user from ensuring he is in conformity with all regulations linked to its activity.