

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

- Trade name EOLYS EXTEND®

**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 )**

Aspiration hazard, Category 1

H304: May be fatal if swallowed and enters airways.

**2.2 Label elements****Regulation (EC) No 1272/2008****Hazardous products which must be listed on the label**

- CAS-No. 90622-58-5 Hydrocarbons, C11-C13, isoalkanes, <2% aromatics

**Pictogram****Signal word**

- Danger

**Hazard statements**

- H304 May be fatal if swallowed and enters airways.

**Precautionary statements**Response

- P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.
- P331 Do NOT induce vomiting.

Storage

- P405 Store locked up.

Disposal

- P501 Dispose of contents/ container to an approved waste disposal plant.

**Additional Labeling**

- EUH066 Repeated exposure may cause skin dryness or cracking.

**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

## 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  Registration number: 01-2119456810-40-xxxx  self classification	Aspiration hazard, Category 1 ; H304	>= 60 - < 70
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 (Respiratory system)	>= 1 - < 5
Iron organic compound	CAS-No. : 865812-80-2  EC-No. : 476-890-3  Registration number: 01-0000019934-60-0000  self classification	Not classified	<= 20

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 off with soap and plenty of water.
- If skin irritation persists, call a physician.

**In case of eye contact**

- Rinse with running water whilst keeping the eyes wide open (at least 15 minutes)
- If eye irritation persists, consult a physician

**In case of ingestion**

- Do NOT induce vomiting.
- If conscious, drink plenty of water.
- Do not leave the victim unattended.
- Vomiting may occur spontaneously
- Lay victim on side.
- Never give anything by mouth to an unconscious person.
- Get immediate medical advice/ attention.

#### 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 (CO<sub>2</sub>)

##### 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.
- Ventilate the area.
- Avoid contact with the skin and the eyes.
- 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.
- Do not allow uncontrolled discharge of product into the environment.

## 6.3 Methods and materials for containment and cleaning up

### **Methods for containment**

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

### **Recovery**

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

### **Decontamination/cleaning**

- Wash off with plenty of water.

### **Disposal**

- Dispose of in accordance with local regulations.

## 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 inhalation of vapour or mist.
- Avoid contact with skin and eyes.

### 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 above their regulatory reporting threshold.

**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.
- Gloves must be inspected prior to use.

**Eye protection**

- Safety glasses

**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.
- Do not allow uncontrolled discharge of product into the environment.

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

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

<b><u>Viscosity</u></b>	<u>Viscosity, kinematic</u> : 6 mm <sup>2</sup> /s ( 40 °C)
<b><u>Explosive properties</u></b>	negative Mechanical sensitivity (shock)
<b><u>Oxidizing properties</u></b>	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**

- no data available

**10.4 Conditions to avoid**

- Heat, flames and sparks.
- Static electricity

**10.5 Incompatible materials**

- Strong bases
- Mineral acids.
- Strong oxidizing agents
- Strong reducing agents.

**10.6 Hazardous decomposition products****Hazardous decomposition products**

- Carbon oxides
- Iron oxides

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

According to the available 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 available data on the components

The product has a low acute toxicity  
Effects of breathing high concentrations of vapour may include:  
Dizziness  
Lung irritation  
Unpublished internal reports



<b>Acute dermal toxicity</b>	According to the available data on the components  Not classified as hazardous for acute dermal toxicity according to GHS. According to the classification criteria for mixtures. Expert judgement
<b>Acute toxicity (other routes of administration)</b>	No data available
<b><u>Skin corrosion/irritation</u></b>	According to the available data on the components  Mild skin irritation According to the classification criteria for mixtures.  Repeated exposure may cause skin dryness or cracking. Expert judgement
<b><u>Serious eye damage/eye irritation</u></b>	According to the available data on the components  Not classified as irritating to eyes According to the classification criteria for mixtures. Expert judgement
<b><u>Respiratory or skin sensitisation</u></b>	According to the available data on the components  Does not cause skin sensitisation. According to the classification criteria for mixtures. Expert judgement
<b><u>Mutagenicity</u></b>	
<b>Genotoxicity in vitro</b>	According to the available data on the components  Product is not considered to be genotoxic According to the classification criteria for mixtures. Expert judgement
<b>Genotoxicity in vivo</b>	According to the available data on the components Product is not considered to be genotoxic According to the classification criteria for mixtures. Expert judgement
<b><u>Carcinogenicity</u></b>	No data available
<b><u>Toxicity for reproduction and development</u></b>	
<b>Toxicity to reproduction/Fertility</b>	According to the available data on the components, The product is not considered to affect fertility., According to the classification criteria for mixtures., Expert judgement
<b>Developmental Toxicity/Teratogenicity</b>	According to the available 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 available data on the components  
No adverse effect has been observed in toxicity tests by repeated administration  
Unpublished internal reports  
Unpublished reports

**Experience with human exposure**

No data available

**CMR effects****Mutagenicity**

Iron organic compound

Not classified as mutagen according to GHS criteria.

**Reproductive toxicity**

Iron organic compound

Not classified as toxic for the reproduction (fertility and/or development) according to GHS criteria

**Aspiration toxicity**

According to the available data on the components, May be fatal if swallowed and enters airways., According to the classification criteria for mixtures., Expert judgement

**Further information**

Iron organic compound

All studies reported above were done using nanomaterials.

**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.

**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 water**Hydrocarbons, C11-C13, isoalkanes,  
<2% aromatics

Not applicable, Expert judgement

Iron organic compound

Not applicable insoluble product,

**Physical- and photo-chemical elimination**

No data available

**Biodegradation****Biodegradability**Hydrocarbons, C11-C13, isoalkanes,  
<2% aromatics

Ready 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

By analogy

Ready biodegradability study:  
Method: OECD Test Guideline 301 B  
- 28 Days  
The substance does not fulfill the criteria for ready biodegradability and ultimate aerobic biodegradability  
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

Due to the distribution coefficient n-octanol/water, accumulation in organisms is possible.

**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

Adsorption

Soil

Koc: 159587.92

Log Koc: 5.2

Method: Calculation method

Immobile in soils

**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****Ecotoxicity assessment****Acute aquatic toxicity**

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

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.