

## Material Safety Data Sheet According to 2004/73/CE

Printing date 18.01.2006

Reviewed on 18.01.2006



### 1 Identification of the substance/preparation and of the company/undertaking

- **Product details**
- **Trade name:** Fleetguard ES Compleat EG Concentrate  
Antifreeze
- **Application of the substance / the preparation** Engine antifreeze
- **Manufacturer/Supplier:**  
FLEETGUARD  
ZI du Grand Guelen  
29556 QUIMPER Cedex 9 France  
Tél: +33 (0)2 98 76 49 49  
Fax: +33 (0)2 98 76 49 50
- **Further information obtainable from:** Laboratory
- **Information in case of emergency:**  
ORFILA Tel: 33 1 45 42 59 59  
Emergency : tel:(44) 20 7955 5095  
NHS Direct: 0845 46 47 / Textphone: 0845 606 46 47

### 2 Composition/information on ingredients

- **Chemical characterization**
- **Description:** Mixture of substances listed below with nonhazardous additions.

· **Dangerous components:**

CAS: 107-21-1 EINECS: 203-473-3	ethanediol	 Xn; R 22	50-100%
CAS: 1310-58-3 EINECS: 215-181-3	potassium hydroxide	 C; R 22-35	< 1%

- **Additional information:** For the wording of the listed risk phrases refer to section 16.

### 3 Hazards identification

- **Hazard description:**



Xn Harmful

- **Information concerning particular hazards for human and environment:**

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

R 22 Harmful if swallowed.

R 36/38 Irritating to eyes and skin.

(Contd. on page 2)

## Material Safety Data Sheet According to 2004/73/CE

Printing date 18.01.2006

Reviewed on 18.01.2006

**Trade name: Fleetguard ES Compleat EG Concentrate  
Antifreeze**

(Contd. of page 1)

**· Classification system:**

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

### 4 First aid measures

**· General information:**

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

- **After inhalation:** In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:**  
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:** Call for a doctor immediately.

### 5 Fire-fighting measures

**· Suitable extinguishing agents:**

CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

- **Protective equipment:** No special measures required.

### 6 Accidental release measures

- **Person-related safety precautions:** Not required.

**· Measures for environmental protection:**

Dilute with plenty of water.

Do not allow to enter sewers/ surface or ground water.

**· Measures for cleaning/collecting:**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

### 7 Handling and storage

**· Handling:****· Information for safe handling:**

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

- **Information about fire - and explosion protection:** No special measures required.

**· Storage:**

- **Requirements to be met by storerooms and receptacles:** No special requirements.

- **Information about storage in one common storage facility:** Not required.

(Contd. on page 3)

## Material Safety Data Sheet According to 2004/73/CE

Printing date 18.01.2006

Reviewed on 18.01.2006

**Trade name: Fleetguard ES Compleat EG Concentrate**  
**Antifreeze**

(Contd. of page 2)

· **Further information about storage conditions:** *Keep container tightly sealed.*

### 8 Exposure controls/personal protection

· **Additional information about design of technical facilities:** *No further data; see item 7.*

· **Ingredients with limit values that require monitoring at the workplace:**

#### 107-21-1 ethanediol

WEL (Great Britain)	Short-term value: 104** mg/m <sup>3</sup> , 40** ppm Long-term value: 10* 52** mg/m <sup>3</sup> , 20** ppm
TLV (EU)	Short-term value: 104 mg/m <sup>3</sup> , 40 ppm Long-term value: 52 mg/m <sup>3</sup> , 20 ppm Skin

#### 1310-58-3 potassium hydroxide

WEL (Great Britain)	Short-term value: 2 mg/m <sup>3</sup>
---------------------	---------------------------------------

· **Additional information:** *The lists valid during the making were used as basis.*

· **Personal protective equipment:**

· **General protective and hygienic measures:**

- Keep away from foodstuffs, beverages and feed.*
- Immediately remove all soiled and contaminated clothing*
- Wash hands before breaks and at the end of work.*
- Avoid contact with the eyes and skin.*

· **Respiratory protection:**

*In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.*

· **Protection of hands:**



Protective gloves

· **Material of gloves**

*The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.*

· **Penetration time of glove material**

*The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.*

(Contd. on page 4)

## Material Safety Data Sheet According to 2004/73/CE

Printing date 18.01.2006

Reviewed on 18.01.2006

**Trade name: Fleetguard ES Compleat EG Concentrate  
Antifreeze**

(Contd. of page 3)

· **Eye protection:**



Tightly sealed goggles

### 9 Physical and chemical properties

· **General Information**

**Form:** Fluid  
**Colour:** Light blue  
**Odour:** Characteristic

· **Change in condition**

**Melting point/Melting range:** Undetermined.  
**Boiling point/Boiling range:** 195°C  
**Solidification point:** -1 -4°C (SOL 50%)

· **Flash point:** Not applicable.

· **Self-igniting:** Product is not selfigniting.

· **Danger of explosion:** Product does not present an explosion hazard.

· **Density at 20°C:** 1.1-1.14 g/cm<sup>3</sup>

· **Solubility in / Miscibility with water:** Fully miscible.

· **pH-value at 20°C:** 10.2 (SOL 50%)

### 10 Stability and reactivity

· **Thermal decomposition / conditions to be avoided:**

No decomposition if used according to specifications.

· **Dangerous reactions** No dangerous reactions known.

· **Dangerous decomposition products:** No dangerous decomposition products known.

### 11 Toxicological information

· **Acute toxicity:**

· **LD/LC50 values relevant for classification:**

**107-21-1 ethanediol**

Oral	LD50	5840 mg/kg (rat)
------	------	------------------

(Contd. on page 5)

## Material Safety Data Sheet According to 2004/73/CE

Printing date 18.01.2006

Reviewed on 18.01.2006

**Trade name: Fleetguard ES Compleat EG Concentrate**  
**Antifreeze**

(Contd. of page 4)

Dermal	LD50	9530 mg/kg (rabbit)
--------	------	---------------------

**· Primary irritant effect:**

- **on the skin:** Irritant to skin and mucous membranes.
- **on the eye:** Irritating effect.
- **Sensitization:** No sensitizing effects known.

**· Additional toxicological information:**

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

Harmful  
Irritant

### 12 Ecological information

**· General notes:**

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water  
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

### 13 Disposal considerations

**· Product:****· Recommendation**

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

**· Uncleaned packaging:**

- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

### 14 Transport information

**· Land transport ADR/RID (cross-border)**

- **ADR/RID class:** 8 (C7) Corrosive substances.
- **Danger code (Kemler):** 80
- **UN-Number:** 3267
- **Packaging group:** III
- **Hazard label:** 8

(Contd. on page 6)

GB

## Material Safety Data Sheet According to 2004/73/CE

Printing date 18.01.2006

Reviewed on 18.01.2006

**Trade name: Fleetguard ES Compleat EG Concentrate  
Antifreeze**

(Contd. of page 5)

· **Description of goods:** 3267 CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (POTASSIUM HYDROXIDE)

· **Maritime transport IMDG:**



· **IMDG Class:** 8  
 · **UN Number:** 3267  
 · **Label** 8  
 · **Packaging group:** III  
 · **EMS Number:** F-A,S-B  
 · **Marine pollutant:** No  
 · **Proper shipping name:** CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (POTASSIUM HYDROXIDE)

· **Air transport ICAO-TI and IATA-DGR:**



· **ICAO/IATA Class:** 8  
 · **UN/ID Number:** 3267  
 · **Label** 8  
 · **Packaging group:** III  
 · **Proper shipping name:** CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (POTASSIUM HYDROXIDE)

### 15 Regulatory information

· **Labelling according to EU guidelines:**

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

· **Code letter and hazard designation of product:**



Xn Harmful

· **Hazard-determining components of labelling:**

ethanediol

· **Risk phrases:**

22 Harmful if swallowed.

(Contd. on page 7)



**Material Safety Data Sheet**  
**According to 2004/73/CE**

Printing date 18.01.2006

Reviewed on 18.01.2006

**Trade name: Fleetguard ES Compleat EG Concentrate**  
**Antifreeze**

(Contd. of page 6)

36/38 Irritating to eyes and skin.

**· Safety phrases:**

- 2 Keep out of the reach of children.
- 13 Keep away from food, drink and animal feeding stuffs.
- 23 Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer).
- 25 Avoid contact with eyes.
- 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- 36/37 Wear suitable protective clothing and gloves.
- 46 If swallowed, seek medical advice immediately and show this container or label.
- 52 Not recommended for interior use on large surface areas.
- 56 Dispose of this material and its container to hazardous or special waste collection point.
- 60 This material and its container must be disposed of as hazardous waste.
- 64 If swallowed, rinse mouth with water (only if the person is conscious).

**16 Other information**

*This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.*

**· Relevant R-phrases**

- 22 Harmful if swallowed.
- 35 Causes severe burns.