

## 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:** RESTORE ALKALINE CLEANER - HEAVYDUTY
- **Application of the substance / the preparation** Alkaline cleaner/ detergent
- **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: 1310-58-3	potassium hydroxide	 C; R 22-35	2.5-10%
EINECS: 215-181-3			

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

### 3 Hazards identification

- **Hazard description:**



C Corrosive

- **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 34 Causes burns.
- **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:** Immediately remove any clothing soiled by the product.

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- **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. Then consult a doctor.
- **After swallowing:**  
Drink plenty of water and provide fresh air. Call for a doctor immediately.  
Do not induce vomiting; call for medical help 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:** Wear protective equipment. Keep unprotected persons away.
- **Measures for environmental protection:** Dilute with plenty of water.
- **Measures for cleaning/collecting:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Use neutralizing agent.  
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.  
Keep receptacles tightly sealed.
- **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:**  
Do not store together with oxidizing and acidic materials.
- **Further information about storage conditions:**  
Keep container tightly sealed.  
Protect from frost.

### 8 Exposure controls/personal protection

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

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

**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.

· **Eye protection:**



Tightly sealed goggles

### 9 Physical and chemical properties

· **General Information**

<b>Form:</b>	Fluid
<b>Colour:</b>	Clear
<b>Odour:</b>	Characteristic

· **Change in condition**

**Melting point/Melting range:** Undetermined.  
**Boiling point/Boiling range:** 100°C

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· <b>Flash point:</b>	Not applicable.
· <b>Self-igniting:</b>	Product is not selfigniting.
· <b>Danger of explosion:</b>	Product does not present an explosion hazard.
· <b>Vapour pressure at 100°C:</b>	1013 hPa
· <b>Density at 20°C:</b>	1.08-1.12 g/cm <sup>3</sup>
· <b>Solubility in / Miscibility with water:</b>	Fully miscible.
· <b>pH-value at 20°C:</b>	11.1

**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:**

· <b>LD/LC50 values relevant for classification:</b>		
1310-58-3 potassium hydroxide		
Oral	LD50	273 mg/kg (rat)

· **Primary irritant effect:**

- **on the skin:** Caustic effect on skin and mucous membranes.
- **on the eye:** Strong caustic 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:

Corrosive

Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

**12 Ecological information**

· **General notes:**

Generally not hazardous for water

Must not reach sewage water or drainage ditch undiluted or unneutralized.

Rinse off of bigger amounts into drains or the aquatic environment may lead to increased pH-values.

A high pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably reduced, so that after the use of the product the aqueous waste, emptied into drains, is

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only low water-dangerous.

### 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:** II
- **Hazard label:** 8
- **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:** II
- **EMS Number:** F-A,S-B
- **Marine pollutant:** No

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· **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:** II

· **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:**



C Corrosive

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

potassium hydroxide

· **Risk phrases:**

34 Causes burns.

· **Safety phrases:**

1/2 Keep locked up and out of the reach of children.

20 When using do not eat or drink.

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.

27/28 After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water.

36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

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.

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64 *If swallowed, rinse mouth with water (only if the person is conscious).*

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**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.

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