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Engen Petroleum Limited

Tel: (021) 403-4911

a/h: (021) 403-4099

ENGEN DEGREASER EF

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## MATERIAL SAFETY DATA SHEETS

### 1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: ENGEN DEGREASER EF  
SUPPLIER: ENGEN PETROLEUM LIMITED

UPDATED: 20 January 2010  
CAS NUMBER: Mixture - NA  
UN NUMBER: Not regulated

**Health Emergency Telephone:** (021) 658-5111 (Red Cross Poison Service)  
**Transport Emergency Telephone:** (011) 975-1278/83 (Hazchemwise)  
**Customer Service Centre:** 086 003 6436 (Sales and Technical Information)  
**MSDS Internet Website:** <http://www.engen.co.za>

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

Blend of ionic and cationic surfactants, polyphosphates and alkaline builders.

Substance Name	Concentration	Risk Phrases
Ethoxylated Alcohol	3 – 5 %	R-38; R-41
Quaternary coco alkylamine ethoxylate	1 – 4 %	R-41
Polyphosphates	4 – 10 %	R-36

See Section 8 for exposure limits (if applicable).

### 3. HAZARDS IDENTIFICATION

**Skin:** Irritant under conditions of prolonged contact.  
**Eyes:** Irritant. May cause damage to the eyes if not washed out.  
**Aquatic Organisms:** Washings could be toxic to aquatic organisms. Limit disposal into waterways unless contaminated water has been allowed to stand for 28 days prior to discharge. Biodegradable within 28 days - OECD 301B.

See Section 11 for additional Biological Hazards (if applicable).

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#### 4. FIRST AID MEASURES

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<b>Inhalation:</b>	Unlikely to occur, unless the product is atomized through a high pressure washing system. If exposed, remove patient from exposure to atomized product and place him in the fresh air. Ensure he is breathing normally. Seek medical attention if discomfort persists.
<b>Skin contact:</b>	The product will de-fat the skin after periods of prolonged exposure, including from contaminated clothing. Remove contaminated clothing and rinse affected area with lots of water. Apply a moisturizing cream. Seek medical attention if discomfort persists.
<b>Eye Contact:</b>	With eyelids wide open, flush eyes with plenty of water immediately and for a minimum of 15 minutes. Keep flushing with water until discomfort disappears. Seek medical attention if discomfort persists.
<b>Ingestion:</b>	Unlikely to occur, but if ingested or splashed into the mouth, wash the mouth out with plenty of water and drink at least two cups of water or milk. Alternatively, drink an acidic fruit juice such as pure orange juice, or a 10% citric acid solution. Seek medical attention if discomfort persists.

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#### 5. FIRE-FIGHTING MEASURES

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<b>Extinguishing Media:</b>	This product is classed as non-flammable under conditions of normal use (see LGI Reports). However, should the product be involved in a fire, extinguishing media such as water fog, mist, spray or foam may be used. Alternatively, use a dry powder or carbon dioxide.
<b>Flammability:</b>	Non-flammable – will not support combustion.
<b>Hazardous Decomposition Products:</b>	Carbon dioxide; carbon monoxide.

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#### 6. ACCIDENTAL RELEASE MEASURES

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<b>Small spills:</b>	Dilute with plenty of water and flush to drain or absorb onto sawdust or sand. Wash the area with water.
<b>Large spills:</b>	Do not allow large spills to enter drains or natural water ways. Contain by means of absorbing onto sawdust or sand and then transfer to containers for disposal according to local regulations. The sand absorbed product may be disposed of in a low hazard site. The local authorities must be alerted if there is a large accidental spillage into natural waterways.

**Note:** According to OECD 301B the product is biodegradable within 28 days

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**7. HANDLING AND STORAGE**  
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Handle sealed containers as you would any other chemical drum. Prevent damage to the container.  
 Refer to section 6 and 8.

**Suitable containers:** Plastic, lined stainless steel or mild steel.  
**Unsuitable containers:** Tin plated mild steel.

**Storage temperature:** 0°C - 45°C (closed container).  
**Storage life:** 1 year (under cover), minimum.  
 3 months (direct sun light).

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**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**  
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**Eye protection:** Wear eye/face protection if splashing is likely to be a problem.

**Hand protection:** Use impervious gloves for periods of prolonged use. Use a protective barrier cream.

**Engineering controls:** Provide an eyewash fountain within the storage and work area.  
 If the product is used in areas with no running water, provide sufficient clean water in portable containers for eye rinsing.

**No occupational exposure limit assigned.**

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**9. PHYSICAL AND CHEMICAL PROPERTIES**  
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Typical physical properties are given below. Consult Product Data Sheet for specific details.

Appearance:	Clear, colourless liquid
Odour:	Characteristic surfactant
pH:	10 - 12
Boiling point:	> 100°C
Flash point:	> 100°C
Flammability:	Non-flammable
Auto ignition temperature:	> 150°C
Explosive properties:	Non-explosive
Oxidising properties:	Non oxidising
Density:	1,030 – 1,060
Solubility:	Water soluble
Pour point:	> 100 <sup>0</sup> C

NA=NOT APPLICABLE NE=NOT ESTABLISHED D=DECOMPOSES

FOR FURTHER TECHNICAL INFORMATION, CONTACT YOUR MARKETING REPRESENTATIVE

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## 10. STABILITY AND REACTIVITY

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**Hazardous reactions:** Incompatible materials are strong oxidising agents and strong acids.

**Hazardous decomposition products:** None known.

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## 11. TOXICOLOGICAL DATA

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**Toxicological Data:** LD50 > 25 000mg/kg (Oral – Rat).

**Irritation:** Skin - mildly irritating (rabbit). Eyes – strong irritant (rabbit).

**Sensitisation:** Not sensitizing.

**Genotoxicity:** No mutagenic potential (Ames test).

### Personal Health Effects

**Inhalation:** High concentrations of atomized mist may be an irritant to the upper respiratory system. Otherwise inhalation of product is not likely to be a problem.

**Skin:** May cause skin irritation on prolonged contact.

**Eye contact:** Irritant.

**Ingestion:** Low acute toxicity if ingested orally, but ingestion may cause irritation of the gastrointestinal tract.

**Long term exposure:** No adverse effects have been reported.

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## 12. ECOLOGICAL INFORMATION

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**1. Ecotoxicological Data:** Component: Quaternary coco alkylamine ethoxylate  
 Oncorhynchus mykiss fish, Acute toxicity LC50 at 90 hours: 125 – 375mg/litre.  
 Daphnia Magna, Acute Toxicity LC50 at 48 hours: 125 – 250mg/litre.  
 Algae EC50 at 72 hours – 20mg/litre.  
 Nitrifying bacteria EC50 at 4 hours – 22 500mg/litre.

**Degradation:** Primary biodegradation > 90%. Complies with the EC decree for surfactant biodegradability (73/404/EEG; 74/405/EEG).

**Bioaccumulation:** Biodegradable and water soluble; the product is not expected to bioaccumulate.

**Ecotoxicology:** Considered toxic to aquatic organisms in large quantities.

**2 Ecotoxicological Data:** Component: Ethoxylated Alcohol  
 Oncorhynchus mykiss fish, Acute toxicity LC50 at 96 hours: 30mg/litre.  
 Daphnia Magna, Acute Toxicity LC50 at 48 hours: 12,5 – 125mg/litre.  
 Algae EC50 at 72 hours – 12,5 - 125mg/litre.

**Degradation:** Primary biodegradation > 90%. Complies with the EC decree for surfactant biodegradability (73/404/EEG; 74/405/EEG).

**Bioaccumulation:** Biodegradable and water soluble; the product is not expected to bioaccumulate.

**Ecotoxicology:** Considered toxic to aquatic organisms in large quantities.

**3. Ecotoxicological Data:** Component: Polyphosphates  
 Golden Orfe LC50 at 48 hours: 10 700mg/litre

**Degradation:** Being inorganic this compound has not BOD or COD.

**Bioaccumulation:** The compound is inorganic and will not bioaccumulate.

**Ecotoxicology:** Considered toxic to aquatic plant life in large quantities. Very high concentrations may chemically “burn” plants.

**Note:** The product is not considered to be a marine pollutant. However, due care should be taken in disposing of the product, especially in the light of the other possible contaminants it is mixed with after use. i.e. in typical use, the product will be used to clean oil or grease off hard surfaces. This oil and/or grease may be classified as a pollutant. Due to this, it is always advisable to utilize some form of an oil separator/settling tank prior to discharge of the used rinse water.

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**13. DISPOSAL CONSIDERATIONS**  
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This product does not fall into any of the classes stipulated by the SABS emergency response handbook code SABS 0232-3.

Disposal should be in accordance with local, state or national legislation for non-hazardous materials, bearing in mind the product is biodegradable within a 28 day period (OECD 301B).

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**14. TRANSPORT INFORMATION**  
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USA DOT: NOT REGULATED BY USA DOT.

IMO: NOT REGULATED BY IMO.

IATA: NOT REGULATED BY IATA.

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**15. REGULATORY INFORMATION**  
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<b>Substance Name:</b>	Ethoxylated Alcohol	R38; R41
	Quaternary coco alkylamine ethoxylate	R41
	Polyphosphates	R36; R41

**Risk Phrases:**

- R-36 means irritating to the eyes
- R-38 means irritating to the skin.
- R-41 means risk of serious damage to the eyes.
- R-51/53 means toxic to aquatic organisms.

**Safety Phrases:**

- S-26 means in case of contact with the eyes rinse immediately with lots of water and seek medical attention.
- S-37/39 means wear suitable (impervious) gloves and eye and/or face protection.

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**16. OTHER INFORMATION**  
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USE: ALL PURPOSE CLEANER

NOTE: ENGEN PRODUCTS ARE NOT FORMULATED TO CONTAIN PCBS.

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 PROCEDURES SHOULD BE PROVIDED TO HANDLERS AND USERS.

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 Prepared by: Engen Petroleum Limited  
 Health, Safety, Environment and Quality Department  
 For further information, contact:  
 Product Safety Adviser Tel: (021) 403 4805  
 P.O. Box 35, Cape Town, 8000 Cell: 083 628 4415