

## Safety Data Sheet

# Shell Retinax Grease EP 2

### 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY/UNDERTAKING

**Product Code** 001A0400  
**Infosafe No.** ACJNJ ZA/eng/C  
**Issued Date** 2003/10/28  
**Product Type/Use** Automotive and industrial grease.

Other Names	Name	Code
	Shell Retinax Grease EP 2	140000007048

**Supplier**  
Shell SA Marketing (Pty) Ltd  
The Campus  
57 Sloane Street  
Bryanston  
2060 Johannesburg  
SOUTH AFRICA

**Telephone Numbers**  
**Emergency Tel.**  
011 608 3300  
Netcare Poison Centre 0800 333 444  
**Telephone/Fax Number**  
Tel: +27 11 996 7000 Fax: +27 11 996 7777

**Email**  
SSA-CusCare@shell.com

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

#### Preparation Description

A lubricating grease containing highly-refined mineral oils and additives. The highly refined mineral oil contains <3% (w/w) DMSO-extract, according to IP346.

### 3. HAZARDS IDENTIFICATION

#### Human Health Hazards

No specific hazards under normal use conditions. Prolonged or repeated exposure may give rise to dermatitis. Used grease may contain harmful impurities.

#### Safety Hazards

Not classified as flammable, but will burn.

#### Environmental Hazards

Not classified as dangerous for the environment.



#### 4. FIRST AID MEASURES

##### Symptoms and Effects

Not expected to give rise to an acute hazard under normal conditions of use.

##### Inhalation

In the unlikely event of dizziness or nausea, remove casualty to fresh air. If symptoms persist, obtain medical attention.

##### Skin

Remove contaminated clothing and wash affected skin with soap and water. If persistent irritation occurs, obtain medical attention. When using high pressure equipment, injection of product under the skin can occur. If high pressure injuries occur, the casualty should be sent immediately to a hospital. Do not wait for symptoms to develop.

##### Eye

Flush eye with copious quantities of water. If persistent irritation occurs, obtain medical attention.

##### Ingestion

Wash out mouth with water and obtain medical attention. Do not induce vomiting.

##### Advice to Doctor

Treat symptomatically. Aspiration into the lungs may result in chemical pneumonitis. Dermatitis may result from prolonged or repeated exposure. High pressure injection injuries require prompt surgical intervention and possibly steroid therapy, to minimise tissue damage and loss of function.

#### 5. FIRE FIGHTING MEASURES

##### Specific Hazards

Combustion is likely to give rise to a complex mixture of airborne solid and liquid particulates and gases, including carbon monoxide and unidentified organic and inorganic compounds.

##### Extinguishing Media

Foam and dry chemical powder. Carbon dioxide, sand or earth may be used for small fires only.

##### Unsuitable Extinguishing Media

Water in jet. Use of halon extinguishers should be avoided for environmental reasons.

##### Protective Equipment

Proper protective equipment including breathing apparatus must be worn when approaching a fire in a confined space.

#### 6. ACCIDENTAL RELEASE MEASURES

##### Personal Precautions

Avoid contact with skin and eyes. Wear PVC, Neoprene or nitrile rubber gloves. Wear rubber knee length safety boots and PVC Jacket and Trousers. Wear safety glasses or full face shield if splashes are likely to occur.

##### Environmental Precautions

Prevent from entering into drains, ditches or rivers. Inform local authorities if this cannot be prevented.

##### Clean-up Methods - Small Spillages

Dispose into a suitable, clearly marked container for disposal or reclamation in accordance with local regulations.

##### Clean-up Methods - Large Spillages

As for small spills.



## 7. HANDLING AND STORAGE

### Handling

Use local exhaust ventilation if there is risk of inhalation of vapours, mists or aerosols. Avoid prolonged or repeated contact with skin. When handling product in drums, safety footwear should be worn and proper handling equipment should be used. Prevent spillages. Cloth, paper and other materials that are used to absorb spills present a fire hazard. Avoid their accumulation by disposing of them safely and immediately. In addition to any specific recommendations given for controls of risks to health, safety and the environment, an assessment of risks must be made to help determine controls appropriate to local circumstances.

### Storage

Keep in a cool, dry, well-ventilated place. Use properly labelled and closeable containers. Avoid direct sunlight, heat sources, and strong oxidizing agents.

### Storage Temperatures

0°C Minimum. 50°C Maximum.

### Recommended Materials

For containers or container linings, use mild steel or high density polyethylene.

### Unsuitable Materials

For containers or container linings, avoid PVC.

### Other Information

Polyethylene containers should not be exposed to high temperatures because of possible risk of distortion.

## 8. EXPOSURE CONTROLS, PERSONAL PROTECTION

### Exposure Limits

Substance	Regulations	Exposure Duration	Exposure Limit	Units	Notes
Oil mist, mineral	ACGIH	TWA	5	mg/m <sup>3</sup>	
	ACGIH	STEL	10	mg/m <sup>3</sup>	

ACGIH                      ACGIH Threshold Limit Values.

### Other Exposure Information

Due to the product's semi-solid consistency, generation of mists and dusts is unlikely to occur.

### Exposure Controls

Use local exhaust ventilation if there is a risk of inhalation of vapours, mists or aerosols.

### Respiratory Protection

Not normally required. If oil mist cannot be controlled, a respirator fitted with an organic vapour cartridge combined with a particulate pre-filter should be used.

### Hand Protection

PVC or nitrile rubber gloves.

### Eye Protection

Wear safety glasses or full face shield if splashes are likely to occur.

### Body Protection

Minimise all forms of skin contact. Overalls and shoes with oil resistant soles should be worn. Launder overalls and undergarments regularly.

### Environmental Exposure Controls

Minimise release to the environment. An environmental assessment must be made to ensure compliance with local environmental legislation.



## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Colour</b>	Light brown.
<b>Physical State</b>	Semi-solid at ambient temperature.
<b>Odour</b>	Characteristic mineral oil.
<b>pH Value</b>	Data not available.
<b>Vapour Pressure</b>	<0.5 Pa at 20°C (based on mineral oil).
<b>Initial Boiling Point</b>	Data not available.
<b>Solubility in Water</b>	Negligible.
<b>Density</b>	900 kg/m <sup>3</sup> at 15°C.
<b>Flash Point</b>	>205°C (COC).
<b>Flammable Limits - Upper</b>	10% V/V (typical) (based on mineral oil).
<b>Flammable Limits - Lower</b>	1% V/V (typical) (based on mineral oil).
<b>Auto-ignition Temperature</b>	Expected to be above 320°C.
<b>Kinematic Viscosity</b>	190 mm <sup>2</sup> /s at 40°C.
<b>Evaporation Rate</b>	Data not available.
<b>Vapour Density (Air=1)</b>	Greater than 1.
<b>Partition co-efficient, n-octanol/water</b>	Log Pow expected to be greater than 6.
<b>Dropping Point</b>	180°C (ASTM D-566).

## 10. STABILITY AND REACTIVITY

### Stability

Stable.

### Conditions to Avoid

Extremes of temperature and direct sunlight.

### Materials to Avoid

Strong oxidizing agents.

### Hazardous Decomposition Products

Hazardous decomposition products are not expected to form during normal storage.

## 11. TOXICOLOGICAL INFORMATION

### Basis for Assessment

Toxicological data have not been determined specifically for this product. Information given is based on a knowledge of the components and the toxicology of similar products.

### Acute Toxicity - Oral

LD50 expected to be > 2000 mg/kg.

### Acute Toxicity - Dermal

LD50 expected to be > 2000 mg/kg.

### Acute Toxicity - Inhalation

Not considered to be an inhalation hazard under normal conditions of use.

### Eye Irritation

Expected to be slightly irritating.

### Skin Irritation

Expected to be slightly irritating.

### Respiratory Irritation

If vapours are inhaled, slight irritation of the respiratory tract may occur.



**Skin Sensitisation**

Not expected to be a skin sensitizer.

**Carcinogenicity**

Product is based on mineral oils of types shown to be non-carcinogenic in animal skin-painting studies. Other components are not known to be associated with carcinogenic effects.

**Mutagenicity**

Not considered to be a mutagenic hazard.

**Reproductive Toxicity**

Not considered to be toxic to reproduction.

**Other Information**

Prolonged and/or repeated contact with products containing mineral oils can result in defatting of the skin, particularly at elevated temperatures. This can lead to irritation and possibly dermatitis, especially under conditions of poor personal hygiene. Skin contact should be minimised. High pressure injection of product into the skin may lead to local necrosis if the product is not surgically removed. Used grease may contain harmful impurities that have accumulated during use. The concentration of such harmful impurities will depend on use and they may present risks to health and the environment on disposal. ALL used grease should be handled with caution and skin contact avoided as far as possible.

**12. ECOLOGICAL INFORMATION**

**Basis for Assessment**

Ecotoxicological data have not been determined specifically for this product. Information given is based on a knowledge of the components and the ecotoxicology of similar products.

**Mobility**

Semi-solid under most environmental conditions. Floats on water. If it comes into contact with soil, it will strongly adsorb to soil particles.

**Persistence / Degradability**

Not expected to be readily biodegradable. Major constituents are expected to be inherently biodegradable, but the product contains components that may persist in the environment.

**Bioaccumulation**

Contains components with the potential to bioaccumulate.

**Ecotoxicity**

Poorly soluble mixture. May cause physical fouling of aquatic organisms. Product is expected to be practically non-toxic to aquatic organisms, LL/EL50 >100 mg/l. (LL/EL50 expressed as the nominal amount of product required to prepare aqueous test extract).

**Other Adverse Effects**

Not expected to have ozone depletion potential, photochemical ozone creation potential or global warming potential.

Product is a mixture of non-volatile components, which are not expected to be released to air in any significant quantities.

**13. DISPOSAL CONSIDERATIONS**

**Waste Disposal**

Dispose into a suitable, clearly marked container for disposal or reclamation in accordance with local regulations. The competence of the contractor to deal satisfactorily with this type of product should be established beforehand. Do not pollute the soil, water or environment with the waste product.

**Product Disposal**

As for waste disposal.



**Container Disposal**

Recycle or dispose of in accordance with the legislation in force with a recognised collector or contractor.

**14. TRANSPORT INFORMATION**

**Transport Information**

Not dangerous for transport under UN, IMO, and IATA/ICAO codes.

**ADR/RID Class**

None Allocated

**ADR/RID Packing Group**

None Allocated

**IMDG Hazard Class**

None Allocated

**IMDG Packing Group**

None Allocated

**IATA Hazard Class**

None Allocated

**IATA Packing Group**

None Allocated

**15. REGULATORY INFORMATION**

EC Symbols	None.
EC Risk Phrase	Not classified.
EC Safety Phrase	Not classified.
EINECS	All components listed or polymer exempt.
TSCA (USA)	All components in compliance.

**Packaging & Labelling**

Safety data sheet available for professional user on request.

**16. OTHER INFORMATION**

**References**

- 67/548/EEC - Dangerous Substances Directive.
- 1999/45/EC - Dangerous Preparations Directive.
- 91/155/EEC - Safety Data Sheet Directive.
- 98/24/EC - Protection of the Health and Safety of Workers from risks related to chemical agents at work.
- 89/686/EEC - Approximation of the laws of the member of states relating to personal protective equipment.
- 76/769/EEC - Restrictions of the marketing and use.
- Relevant Comité Européen de Normalisation (CEN) standards giving specific requirements for personal protective equipment.
- European Model Code of Safe Practice in the Storage and Handling of Petroleum Products
- Concawe Report 01/53 - Classification and labelling of petroleum substances according to the EU dangerous substances directive.
- Concawe Report 03/82 - Precautionary Advice on the Handling of Used Engine Oils
- Concawe Report 01/97 - Petroleum Products - First Aid and Emergency Advice
- Concawe Report 86/89 - Health Aspects of Workers Exposure to Oil Mists
- Concawe Report 01/54 - Environmental Classification of Petroleum Substances - Summary Data and Rationale

