SAFETY DATA SHEET

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Shell Retinax Grease LX 2

1. Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Shell Retinax Grease LX 2

1.2 Relevant identified uses of the substance or mixture and uses advised against

Area of use: Automotive and industrial grease.

1.3 Details of the supplier of the safety data sheet

Supplier:

ALFA LAVAL Tumba AB

Hans Stahles väg
SE-147 80 Tumba
Sweden
Tel: +46 8 53 06 50 00
Fax: + 46 8 53 06 52 59

Manufacture:

Univar AB

Box 4072
SE-203 11 Malmö
Sweden
Tel: 040-352800
Fax: 040-125172

e-mail: sds.question@alfalaval.com

1.4 Emergency telephone number: Dial in case of emergency poisoning and ask for Poison Information both day and night. Dial + 46 (0) 8-331231 if you have other questions concerning acute poisonings mon-fri 9.00-17.00

2. Hazards identification

2.1 Classification of the substance or mixture

This product is not classified as hazardous according to current regulations.

2.2 Label elements

Safety data sheet available for professional users on request.

2.3 Other hazards

Expected to cause slight irritation to skin and eyes.
Inhalation of vapors or mists may cause irritation.
Prolonged or repeated skin contact without proper cleaning can clog the pores of the skin resulting in disorders such as oil acne/folliculitis. High-pressure injection under the skin may cause serious damage including local necrosis. Used oil may contain harmful impurities.

3. Composition/information on ingredients

3.2 Mixtures
Declaration of the constituents according to CLP 1272/2008/EC

Substances	Registration No.	Weight - (%)	CAS No.	EC No	Classification
Zinc naphthenate	-	1,00-2,00	12001-85-3	234-409-2	Eye irrit. 2; H319 Skinn Irrit. 2; H315 Aquatic Chronic 2; H411

Declaration of ingredients constituents to 1999/45/EC

Substances	Registration No.	Weight - (%)	CAS No.	EC No	Classification
Zinc naphthenate	-	1,00-2,00	12001-85-3	234-409-2	Xi; R36/38; N; R51/53

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.

See section 16 for explanation to R-phrases and/or Hazard statements

4. First aid measures

4.1 Description of first aid measures

General recommendations — Not expected to be a health hazard when used under normal conditions. Consult a physician. Show this safety data sheet to a physician.

First aid – eye contact — Flush eye with copious quantities of water. If persistent irritation occurs, obtain medical attention.

First aid- skin contact — Remove contaminated clothing. Flush exposed area with water and follow by washing with soap if available. 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. Obtain medical attention even in the absence of apparent wounds.

First aid- ingestion — In general no treatment is necessary unless large quantities are swallowed, however, get medical advice.

First aid- inhalation — No treatment necessary under normal conditions of use. If symptoms persist, obtain medical advice.

4.2 Most important symptoms and effects, both acute and delayed — Oil acne/folliculitis signs and symptoms may include formation of black pustules and spots on the skin of exposed areas. Local necrosis is evidenced by delayed onset of pain and tissue damage a few hours following injection. Ingestion may result in nausea, vomiting and/or diarrhoea.

4.3 Indication of any immediate medical attention and special treatment needed	Treat symptomatically. High pressure injection injuries require prompt surgical intervention and possibly steroid therapy, to minimise tissue damage and loss of function. Because entry wounds are small and do not reflect the seriousness of the underlying damage, surgical exploration to determine the extent of involvement may be necessary. Local anaesthetics or hot soaks should be avoided because they can contribute to swelling, vasospasm and ischaemia. Prompt surgical decompression, debridement and evacuation of foreign material should be performed under general anaesthetics, and wide exploration is essential.

5. Firefighting measures

5.1 Extinguishing media **a) Suitable extinguishing media**	Foam, water spray or fog. Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only.
b) Unsuitable extinguishing media	Do not use water jet.
5.2 Special hazards arising from the substance or mixture	Hazardous combustion products may include: A complex mixture of airborne solid and liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic compounds.
5.3 Advice for firefighters	Proper protective equipment including breathing apparatus must be worn when approaching a fire in a confined space.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures	Use personal protection clothing according to section 8. Avoid contact with spilled or released material. Avoid contact with skin and eyes.
6.2 Environmental precautions	Use appropriate containment to avoid environmental contamination. Prevent from spreading or entering drains, ditches or rivers by using sand, earth, or other appropriate barriers.
6.3 Methods and material for containment and cleaning up Large/Small spills	Shovel into a suitable clearly marked container for disposal or reclamation in accordance with local regulations.
6.4 Reference to other sections	Personal protection, see section 8. Disposal, see section 13.

7. Handling and storage

7.1 Precautions for safe handling

Avoid prolonged or repeated contact with skin. Avoid inhaling vapour and/or mists. When handling product in drums, safety footwear should be worn and proper handling equipment should be used.
Use local exhaust ventilation if there is risk of inhalation of vapours, mists or aerosols. Properly dispose of any contaminated rags or cleaning materials in order to prevent fires.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed and in a cool, well-ventilated place. Use properly labelled and closeable containers. Storage Temperature: 0 - 50 °C / 32 - 122 °F.
Recommended materials: For containers or container linings, use mild steel or high density polyethylene.
Unsuitable Materials : PVC
Additional Information: Polyethylene containers should not be exposed to high temperatures because of possible risk of distortion.

7.3 Specific end use

No information.

8. Exposure controls/personal protection

8.1 Control parameters

National occupational exposure limit values that correspond to Community occupational exposure limit values in accordance with Directive 98/24/EC, including any notations as referred to in Article 2(1) of Commission Decision 95/320/EC

Substance	CAS No	*Limit value – Short term*		*Limit value - 8 h*		Notifications
		ppm	*mg/m³*	*ppm*	*mg/m³*	
Oil mist, metal working fluids GESTIS United Kingdom					1	

8.2 Exposure controls

Appropriate engineering controls

Ensure adequate ventilation.

Eye/face protection

Wear safety glasses or full face shield if splashes are likely to occur. Approved by EU-standard EN166.

Hand protection	Where hand contact with the product may occur the use of gloves approved to relevant standards (e.g. Europe: EN374, US: F739) made from the following materials may provide suitable chemical protection: PVC, neoprene or nitrile rubber gloves. Suitability and durability of a glove is dependent on usage. Contaminated gloves should be replaced. Personal hygiene is a key element of effective hand care. Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturizer is recommended.
Respiratory protection	No respiratory protection is ordinarily required under normal conditions of use. Select respiratory protection equipment suitable for the specific conditions of use. Check with respiratory protective equipment suppliers. Where air-filtering respirators are suitable, select an appropriate combination of mask and filter. Select a filter suitable for combined particulate/organic gases and vapours [boiling point >65 °C (149 °F)].
Other protection	Skin protection not ordinarily required beyond standard issue work clothes.
Environmental exposure controls	See section 6.

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	Red. Semi-solid.
Odour	Slight hydrocarbon.
Odour threshold	No information
pH (X ºC)	Not applicable.
Melting point/freezing point	No information
Initial boiling point and boiling range	No information
Flash point	> 150 °C / 302 °F (COC)
Evaporation rate	No information
Flammability (solid, gas)	No information
Upper/lower flammability or explosive limits	Typical 1 - 10 %(V) (based on mineral oil)
Vapour pressure	< 0.5 Pa at 20 °C / 68 °F (estimated value(s))
Vapour density	Relative vapour density (air=1): > 1 (estimated value(s))
Relative density	No information
Solubility(ies)	Water solubility: Negligible.
Partition coefficient: n-octanol/water	> 6 (based on information on similar products)
Auto-ignition temperature	> 320 °C / 608 °F
Decomposition temperature	No information
Viscosity	Kinematic viscosity: not applicable
Explosive properties	No information
Oxidising properties	No information
9.2 Other information	Pour point: Typical >245 °C / 473 °F Density: Typical 900 kg/m³ at 15 °C / 59 °F

10. Stability and reactivity

10.1 Reactivity	May react with strong oxidising agents.
10.2 Chemical stability	Stable.
10.3 Possibility of hazardous reactions	No information.
10.4 Conditions to avoid	Extremes of temperature and direct sunlight.
10.5 Incompatible materials	Strong oxidising agents.
10.6 Hazardous decomposition products	Hazardous decomposition products are not expected to form during normal storage.

11. Toxicological information

11.1 Information on toxicological effects

Acute toxicity	Expected to be of low toxicity: LD50 > 5000 mg/kg , Rat Expected to be of low toxicity: LD50 > 5000 mg/kg , Rabbit
Irritation	Expected to be slightly irritating to skin and eyes. Inhalation of vapours or mists may cause irritation.
Corrosivity	No information.
Sensitisation	Not expected to be a skin sensitiser.
Repeated dose toxicity	Prolonged or repeated skin contact without proper cleaning can clog the pores of the skin resulting in disorders such as oil acne/folliculitis.
Carcinogenicity	Product contains mineral oils of types shown to be noncarcinogenic in animal skin-painting studies. Highly refined mineral oils are not classified as carcinogenic by the International Agency for Research on Cancer (IARC). Other components are not known to be associated with carcinogenic effects.
Mutagenicity	Not considered a mutagenic hazard.
Toxicity for reproduction.	Not expected to be a hazard.
Additional information	Used oils may contain harmful impurities that have accumulated during use. The concentration of such impurities will depend on use and they may present risks to health and the environment on disposal. ALL used oil should be handled with caution and skin contact avoided as far as possible. High pressure injection of product into the skin may lead to local necrosis if the product is not surgically removed. Information given is based on data on the components and the toxicology of similar products.

12. Ecological information

12.1 Toxicity	Poorly soluble mixture. May cause physical fouling of aquatic organisms. Expected to be practically non toxic: LL/EL/IL50 > 100 mg/l (to aquatic organisms) (LL/EL50 expressed as the nominal amount of product required to prepare aqueous test extract). Mineral oil is not expected to cause any chronic effects to aquatic organisms at concentrations less than 1 mg/l.
12.2 Persistence and degradability	Expected to be not readily biodegradable. Major constituents are expected to be inherently biodegradable, but the product contains components that may persist in the environment.
12.3 Bio accumulative potential	Contains components with the potential to bio accumulate.
12.4 Mobility in soil	Semi-solid under most environmental conditions. Floats on water. If it enters soil, it will adsorb to soil particles and will not be mobile.
12.5 Results of PBT and vPvB assessment	No information.
12.6 Other adverse effects	None known.
Other Adverse Effects	Eco toxicological data have not been determined specifically for this product. Information given is based on knowledge of the components and the ecotoxicology of similar products. Product is a mixture of non-volatile components, which are not expected to be released to air in any significant quantities. Not expected to have ozone depletion potential, photochemical ozone creation potential or global warming potential.

13. Disposal considerations

13.1 Waste treatment methods

Material Disposal: Do not dispose into the environment, in drains or in water courses.
Product residues, waste, etc. are hazardous waste. Disposal, transport, storage and handling of waste shall be in accordance with applicable regulations.

Container Disposal: Dispose in accordance with applicable regulations, preferably to a recognized collector or contractor.

Local regulations: Disposal should be in accordance with applicable regional, national and local laws and regulations.

EWC code:

According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. Waste codes should be assigned by the user, preferably in discussion with the waste disposal authorities.

Example of EWC codes:
12 01 12 spent waxes and fats.
Proposal for empty packaging: 15 01 02 plastic packaging 15 01 04 metallic packaging. Packaging containing residues that have not been emptied until drip dry must be handled as hazardous waste and must be properly sealed before disposal. Examples of waste code: 15 01 10: packaging containing residues of or contaminated by dangerous substances.

14. Transport information

	ADR/RID-S	IMDG	IATA
14.1 UN number	Not classified as dangerous goods.	Not classified as dangerous goods.	Not classified as dangerous goods.
14.2 UN proper shipping name	Not relevant.	Not relevant.	Not relevant.
14.3 Transport hazard class(es)	Not relevant.	Not relevant.	Not relevant.
14.4 Packing group	Not relevant.	Not relevant.	Not relevant.
14.5 Environmental hazards	Not relevant.	Not relevant.	Not relevant.
14.6 Special precautions for user	Not relevant.	Not relevant.	Not relevant.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not relevant.	Not relevant.	Not relevant.

15. Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture	Gestis, International Limit Values European Waste Catalouge and Hazardous Waste List
15.2 Chemical safety assessment	No.

16. Other information

Hazard statements/Risk phrases	R36/38 Irritating to eyes and skin. R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment H315 Causes skin irritation. H319 Causes serious eye irritation. H411 Toxic to aquatic life with long lasting effects.
Important changes have been made in section	General update according to EU 453/2010.

LIMITATION OF LIABILITY

This document is only intended to be used as guidance as regards the risks of which we are aware that are associated with the product. Every individual who works with the product or in close proximity of it must receive suitable training. Individuals who come into contact with the product must be capable of using their own judgement as regards conditions or methods for handling, storing and using the product. Alfa Laval is not liable for demands, losses or damage of any kind that arise from flaws or deficiencies in this document or from using, handling, storing or disposing of the product unless it can be proven that Alfa Laval has acted in a grossly negligent manner. **Beyond what has been agreed upon and specified in writing with Alfa Laval in the individual case, Alfa Laval makes no promises or assumes any liability, including but not limited to implicit guarantees regarding marketability or appropriateness in terms of both the information provided in this document and the product to which the information refers.**