



LGHP 2

MATERIAL SAFETY DATA SHEET (MSDS)

Section 1 - Product and company identification

Product identifier : SKF Grease LGHP 2 or LGHP 2

Product description : N/Av

Internal part no. : LGHP 2

Product use : High performance polyurea bearing grease

Trade name : SKF Grease LGHP 2 or LGHP 2

Supplier's name and address:
SKF Canada Limited
40 Executive Court
Scarborough, ON, Canada
M1S 4N4

Manufacturer's name and address:
SKF Maintenance Products B.V.
Post Box # 1008
NL-3430 BA
Nieuwegein, Utrecht, The Netherlands

Emergency tel. # : 1. SKF, The Netherlands at +31 30 6307200
2. SKF, Scarborough, Ontario at (416) 299-1220 (24 Hours)

Section 2 - Composition/information on ingredients

<u>Ingredients</u>	<u>CAS #</u>	<u>% (weight)</u>	<u>LC50(4hr)</u> <u>inh, rat</u>	<u>LD50</u>	
				<u>oral</u>	<u>dermal</u>
Alkyl diphenylamine	68411-46-1	1.00 - 5.00	N/Av	>5000 mg/kg (rat)	>2000 mg/kg (rabbit)
Base oil	64742-70-7	60.00 - 100.00	N/Av	N/Av	N/Av

Section 3 - Hazards identification

Emergency overview

Paste; Light blue. Characteristic odour.

Caution! May be mildly irritating to eyes and skin. Ingestion of large amounts may be harmful. May cause respiratory irritation.

Potential health effects

Target organs : Eyes, skin, respiratory system and digestive system.

Routes of exposure : Eye contact; Skin contact; Ingestion; Inhalation.

Signs and symptoms of short-term (acute) exposure

Inhalation : If product is heated or mists are formed, inhalation may cause irritation to the nose, throat and respiratory tract. May cause coughing and breathing difficulties.

Skin : May cause mild skin irritation. Prolonged contact, such as when trapped against the skin under clothing or jewelry, may be more irritating. Hydrocarbons injected into the skin under pressure can cause severe injury.

Eyes : May cause mild eye irritation.

Ingestion : Ingestion may cause irritation to mucous membranes. May have laxative effects. May cause nausea, vomiting, and diarrhea.

Potential chronic health effects

: Prolonged or repeated skin contact may cause defatting and drying resulting in irritation and possible dermatitis.

Other important hazards : None reported by the manufacturer.

Carcinogenic status : See TOXICOLOGICAL INFORMATION, Section 11.

Additional health hazards : See TOXICOLOGICAL INFORMATION, Section 11.

Section 4 - First aid measures

Inhalation : If breathed in, move person into fresh air. If breathing has stopped, give artificial respiration. Get medical attention/advice if you feel unwell.

Skin contact : In case of contact with skin, wash with mild soap and plenty of water. If irritation persists, seek prompt medical attention. Wash contaminated clothing before re-use. Subcutaneous injection may require surgical treatment.



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- Eye contact** : Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.
- Ingestion** : Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention.

Section 5 - Fire fighting measures

Fire hazards/conditions of flammability

- : Not flammable under normal conditions of handling. Liquid may burn upon heating to temperatures at or above the flashpoint. Empty containers retain residue (liquid and/or vapour) and can be dangerous. Do not pressurize, cut, heat or weld empty containers. Product may float, and be re-ignited at the water's surface.

Flash point : 210°C

Flash point method : Seta Flash CC

Auto-ignition temperature : N/Av

Lower flammable limit (% by vol.)

Upper flammable limit (% by vol.)

: N/Av

: N/Av

Oxidizing properties : None known.

Flame projection length : N/Av

Flashback observed : N/Av

Explosion data: Sensitivity to mechanical impact / static discharge

- : Not expected to be sensitive to mechanical impact or static discharge.

Suitable extinguishing media

- : Dry chemical, foam, carbon dioxide and water fog. Do not use water jet, as this may spread burning material.

Special fire-fighting procedures/equipment

- : Firefighters should wear proper protective equipment and self contained breathing apparatus with full face piece operated in positive pressure mode. Move containers from fire area if safe to do so. Water spray may be useful in cooling equipment exposed to heat and flame. Direct water or foam spray may cause frothing which can increase the intensity and range of the fire.

Hazardous combustion products

- : Oxides of carbon, sulphur, nitrogen, phosphorus and other unidentified organic compounds.

Section 6 - Accidental release measures

Personal precautions

- : Restrict access to area until completion of clean-up. Ensure clean-up is conducted by trained personnel only. All persons dealing with clean-up should wear the appropriate protective equipment including self-contained breathing apparatus. Keep all other personnel upwind and away from the spill/release.

Environmental precautions

- : Do not flush into surface water or sanitary sewer system. For large spills, dike the area to prevent spreading.

Spill response/cleanup

- : Ventilate area of release. Eliminate all ignition sources. Stop the spill at source if it is safe to do so. Cover any spilled material with non-combustible absorbent material, such as vermiculite or sand, then place absorbent material into a container for later disposal (see Section 13). Clean contaminated floors and objects thoroughly while observing environmental regulations. Notify the appropriate authorities as required.

Prohibited materials

- : None known.

Section 7 - Handling and storage

Safe handling procedures

- : Wear suitable protective equipment during handling. Use in a well ventilated area. Avoid breathing vapours. Avoid contact with skin, eyes and clothing. Keep container tightly closed when not in use. Keep away from heat and flame. Keep away from incompatibles. Handle and open container with care. Wash thoroughly after handling. Warning: High pressure greasing equipment is capable of injecting product under the skin. Such apparatus should be handled with care. See Section 3. Do not heat above flashpoint.

Storage requirements

- : Store in a cool, dry, well ventilated area, away from heat and ignition sources. Store away from incompatible materials. Storage area should be clearly identified, clear of obstruction and accessible only to trained and authorized personnel. Inspect periodically for damage or leaks.

Incompatible materials

- : Avoid contact with strong oxidants such as liquid chlorine, concentrated oxygen, sodium hypochlorite or calcium hypochlorite.

Special packaging materials

- : Always keep in containers made of the same materials as the supply container.



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Section 8 - Exposure controls and personal protection

Ingredients	ACGIH TLV		OSHA PEL	
	TWA	STEL	PEL	STEL
Alkyl diphenylamine	N/Av	N/Av	N/Av	N/Av
Base oil	5mg/m ³ (As 'Oil mist, mineral')	N/Av	5mg/m ³ (As 'Oil mist, mineral')	N/Av

Ventilation and engineering measures

: Use with adequate ventilation. Local ventilation is recommended if the product is misted or used in a confined space, or if the TLV is exceeded.

Respiratory protection

: Where exposure is likely to be prolonged or is unknown wear approved respiratory protection. If the TLV is exceeded, a NIOSH/MSHA-approved respirator is advised.

Skin protection

: Impervious gloves must be worn when using this product. Confirmation of what type of material is most suitable for the intended application, should be obtained from glove suppliers.

Eye / face protection

: Safety glasses with side-shields or chemical splash goggles.

Other protective equipment

: Depending on conditions of use, an impervious apron should be worn. Other equipment may be required depending on workplace standards. An eyewash station and safety shower should be made available in the immediate working area. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Wash hands before breaks and at the end of workday.

Section 9 - Physical and chemical properties

Physical state	: paste	Appearance	: Light blue
Odour	: characteristic	Odour threshold	: N/Av
pH	: N/Av	Specific gravity	: 0.9
Boiling point	: N/Av	Coefficient of water/oil distribution	: N/Av
Melting/freezing point	: 253°C	Solubility in water	: Insoluble.
Vapour pressure (mmHg @ 20° C / 68° F)	: N/Av	Evaporation rate (n-Butyl acetate = 1)	: N/Av
Vapour density (Air = 1)	: N/Av	Volatiles (% by weight)	: N/Av
Volatile organic compounds (VOC's)	: N/Av	Viscosity	: N/Av
Absolute pressure of container	: N/Av		

Section 10 - Reactivity and stability data

Stability and reactivity : Stable under the recommended storage and handling conditions prescribed. Hazardous polymerisation does not occur.

Conditions to avoid : Keep away from excessive heat, open flames, sparks and other possible sources of ignition. Empty containers retain residue (liquid and/or vapour) and can be dangerous. Do not pressurize, cut, heat or weld empty containers.

Materials to avoid and incompatibility : See Section 7 (Handling and Storage) section for further details.

Hazardous decomposition products : None known, refer to hazardous combustion products in Section 5.

Section 11 - Toxicological information

Toxicological data : There is no available data for the product itself, only for the ingredients. See Section 2.

Irritancy of product : Mild skin irritant. Mild eye irritant.



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- Carcinogenic status** : No components are listed as carcinogens by ACGIH, IARC, OSHA or NTP.
- Reproductive effects** : Not expected to have other reproductive effects.
- Teratogenicity** : Not expected to be a teratogen.
- Mutagenicity** : Not expected to be mutagenic in humans.
- Sensitization to material** : Not expected to be a skin or respiratory sensitizer.
- Synergistic materials** : None known or reported by the manufacturer.
- Medical conditions aggravated by overexposure** : Pre-existing skin, eye and respiratory disorders.


Section 12 - Ecological information

- Environmental effects** : No information available.
- Important environmental characteristics** : No data is available on the product itself. The product should not be allowed to enter drains or water courses, or be deposited where it can affect ground or surface waters.
- Ecotoxicological** : No data is available on the product itself.

Section 13 - Disposal considerations

- Handling for disposal** : Handle waste according to recommendations in Section 7. Do not contaminate ponds, waterways or ditches with chemical or used container.
- Methods of disposal** : Dispose of in accordance with federal, provincial and local hazardous waste laws.

Section 14 - Transportation information

Regulatory Information	UN Number	Shipping Name	Class	Packing Group	Label
TDG	None	Not regulated.	not regulated	none	
TDG Additional information	None.				

Section 15 - Regulatory information

Canadian Environmental Protection Act (CEPA): This product contains a chemical or chemicals that are on the Canadian Non - Domestic Substances List. This product contains: Base oil. All other ingredients listed appear on the DSL.

WHMIS classification:

This product is not a WHMIS controlled product in Canada.



This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR.

US federal information:

TSCA: All listed ingredients appear on the Toxic Substances Control Act (TSCA) inventory.

Section 16 - Other information

- Legend** :
- ACGIH: American Conference of Governmental Industrial Hygienists
 - CAS: Chemical Abstract Services
 - DSL: Domestic Substances List
 - HSDB: Hazardous Substances Data Bank
 - IARC: International Agency for Research on Cancer
 - Inh: Inhalation
 - MSHA: Mine Safety and Health Administration
 - N/Ap: not applicable

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N/Av: not available
NIOSH: National Institute of Occupational Safety and Health
OSHA: Occupational Safety and Health Administration
PEL: Permissible exposure limit
RTECS: Registry of Toxic Effects of Chemical Substances
STEL: Short Term Exposure Limit
TDG: Canadian Transportation of Dangerous Goods Act & Regulations
TLV: Threshold Limit Values
TSCA: Toxic Substance Control Act
TWA: Time Weighted Average
WHMIS: Workplace Hazardous Materials Identification System

References

- : 1. International Agency for Research on Cancer Monographs, searched 2007.
- 2. Canadian Centre for Occupational Health and Safety, CCIInfoWeb databases, 2007 (Chempendium, HSDB and RTECs).
- 3. Material Safety Data Sheets from manufacturer.
- 4. ACGIH, Threshold Limit Values for Chemical Substances and Physical Agents & Biological Exposure Indices for 2006.

Prepared for:

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