

Safety Data Sheet dated 27/6/2023, version 1

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Mixture identification:

Trade name: GEAR BOX GREASE

Trade code: GR46

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

Recommended use:

Multipurpose grease for professional use

1.3. Details of the supplier of the safety data sheet

Company:

LANDOIL TECHNOLOGY S.R.L. - Via M. Serenari,28/A - 40013 CASTEL MAGGIORE (BO)

Italia

Telefono n. +39 (0)516320751

Competent person responsible for the safety data sheet:

Laboratorio@land-oil.it

1.4. Emergency telephone number

Telefono n. +39 (0)51 6320751

1.5 Antipoison center(s):

AU: Umweltbundesamt GmbH Abteilung Chemikalien, Spittelauer Lände 5 - 1090 Wien -

Telephone +43 1 31304 5620 - Email sdbreg@umweltbundesamt.at

BE: Centre antipoisons / Antigif Centrum - Hôpital Militaire Reine Astrid Rue Bruyn 1 - 1120

Bruxelles - Tel. +32 02 264 96 36 - Fax: +32 02 264 96 46 - Email: info@poisoncentre.be

HR: Croatian Institute for Toxicology and Antidoping, 10000 Zagreb Borongajska cesta 83 g -

Fax: + 385 01 46 41 368 - E-mail: hzt@hzt.hr

CZ: Department of Chemicals and Biocides Ministry of Health, Palackého náměstí 4 CZ - 128

01 Praegue 2 - Tel/fax: +420 2 2497 1111 - E-mail Poison Center (not AB): tis@vfn.cz

DE: Federal Institute for Risk Assessment (BfR) Unit: Poison and Product Documentation

Centre, Max-Dohrn-Str. 8-10 - 10589 Berlin - Tel. +49 30-18412-3460 - Email:

produkt-meldungen@bfr.bund.de

DK: The Danish Environmental Protection Agency, Haraldsgade 53 - 2100 København Ø -

Tel: +45 72 54 40 00 - Email: mst@mst.dk

ES: Instituto Nacional de Toxicología y Ciencias Forenses, Calle José Echegaray, 4 - 28032

Las Rozas de Madrid, Madrid - Tel: +34 917689800 - Email: intcf@justicia.es and

intcf.doc@justicia.es

FR: Centre antipoison et de toxicovigilance de Nancy, Hôpital Central 29 avenue du Maréchal

de Lattre de Tassigny - 54035 Nancy Cedex - Tel : +33 3 83 22 50 50 - Email:

cap@chu-nancy.fr

UK: National Poisons Information Service (NPIS), National Poisons Information Service

(Birmingham Unit) City Hospital Dudley Rd

B187QH - Birmingham - Emergency call (healthcare professionals): (+44) 844 892 0111 -

0344 892 0111 - Email: director.birmingham.unit@npis.org

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

EC regulation criteria 1272/2008 (CLP)

The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP).

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Hazard pictograms:

None

Hazard statements:

None

Precautionary statements:

None

Special Provisions:

None

Special provisions according to Annex XVII of REACH and subsequent amendments:

None

2.3. Other hazards

No PBT, vPvB or endocrine disruptor substances present in concentration $\geq 0.1\%$

Other Hazards:

No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances

Identification of the substance:

Trade code: GR46

None.

3.2. Mixtures

N.A.

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Wash with plenty of water and soap.

In case of eyes contact:

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

In case of ingestion:

Do not under any circumstances induce vomiting. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

4.2. Most important symptoms and effects, both acute and delayed

None

4.3. Indication of any immediate medical attention and special treatment needed

Treatment:

None

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Water Spray

CO2 or Dry chemical fire extinguisher.

Extinguishing media which must not be used for safety reasons:

Water jets

5.2. Special hazards arising from the substance or mixture

Burning produces heavy smoke.

Do not inhale explosion and combustion gases.

5.3. Advice for firefighters

Use suitable breathing apparatus .

SECTION 6: Accidental release measures

- 6.1. Personal precautions, protective equipment and emergency procedures
 - Wear personal protection equipment.
 - Remove persons to safety.
 - See protective measures under point 7 and 8.
- 6.2. Environmental precautions
 - Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.
 - In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.
- 6.3. Methods and material for containment and cleaning up
 - For containment:
 - Contain spillages small quantities of product with earth, sand or other absorbent inert material
 - For cleaning up:
 - Clear spills immediately
- 6.4. Reference to other sections
 - See also section 8 and 13

SECTION 7: Handling and storage

- 7.1. Precautions for safe handling
 - Avoid contact with skin and eyes, inhalation of vapours and mists.
 - See also section 8 for recommended protective equipment.
 - Advice on general occupational hygiene:
 - Do not eat or drink while working.
- 7.2. Conditions for safe storage, including any incompatibilities
 - Keep the product in the original containers stored in environments and conditions to ensure the control / maintenance of leaks.
 - Store away from sources of heat / ignition and exposure to sunlight.
 - Keep the containers tightly closed.
 - Ensure adequate ventilation of the premises.
 - Avoid the accumulation of electrostatic charges.
 - Keep away from food, drink and feed.
 - Incompatible materials:
 - None in particular.
 - Instructions as regards storage premises:
 - Adequately ventilated premises.
- 7.3. Specific end use(s)
 - None in particular

SECTION 8: Exposure controls/personal protection

- 8.1. Control parameters
 - No occupational exposure limit available
 - DNEL Exposure Limit Values
 - N.A.
 - PNEC Exposure Limit Values
 - N.A.
- 8.2. Exposure controls
 - Eye protection:
 - For more information refer to the UNI-EN 166 standard.
 - Protection for skin:
 - For more information please refer to UNI-EN 465/466/467
 - Overall.
 - Protection for hands:

Disposable gloves in neoprene, nitrile or pvc.
Work gloves resistant to garlic, mineral oils and solvents.
For more information refer to the UNI-EN 374 standard

Respiratory protection:

Not needed for normal use.

Thermal Hazards:

None

Environmental exposure controls:

None

Appropriate engineering controls:

None

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties	Value	Method:	Notes
Physical state:	N.A.	--	--
Colour:	Orange	--	--
Odour:	N.A.	--	--
Melting point/freezing point:	N.A.	--	--
Boiling point or initial boiling point and boiling range:	N.A.	--	--
Flammability:	N.A.	--	--
Lower and upper explosion limit:	N.A.	--	--
Flash point:	>240°C ° C	--	--
Auto-ignition temperature:	N.A.	--	--
Decomposition temperature:	N.A.	--	--
pH:	N.A.	--	--
Kinematic viscosity:	N.A.	--	--
Solubility in water:	NO	--	--
Solubility in oil:	SI	--	--
Partition coefficient n-octanol/water (log value):	N.A.	--	--
Vapour pressure:	N.A.	--	--
Density and/or relative density:	< 1 kg/dm ³	--	--
Relative vapour density:	N.A.	--	--
Particle characteristics:			
Particle size:	N.A.	--	--

9.2. Other information

No other relevant information

SECTION 10: Stability and reactivity

10.1. Reactivity

Avoid contact with strong acids and bases and oxidizing agents

10.2. Chemical stability

The product is stable under normal storage conditions.

10.3. Possibility of hazardous reactions

- None
- 10.4. Conditions to avoid
Stable under normal conditions.
- 10.5. Incompatible materials
None in particular.
- 10.6. Hazardous decomposition products
None.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Toxicological information of the substance:

GEAR BOX GREASE

- a) acute toxicity
Not classified
Based on available data, the classification criteria are not met
- b) skin corrosion/irritation
Not classified
Based on available data, the classification criteria are not met
- c) serious eye damage/irritation
Not classified
Based on available data, the classification criteria are not met
- d) respiratory or skin sensitisation
Not classified
Based on available data, the classification criteria are not met
- e) germ cell mutagenicity
Not classified
Based on available data, the classification criteria are not met
- f) carcinogenicity
Not classified
Based on available data, the classification criteria are not met
- g) reproductive toxicity
Not classified
Based on available data, the classification criteria are not met
- h) STOT-single exposure
Not classified
Based on available data, the classification criteria are not met
- i) STOT-repeated exposure
Not classified
Based on available data, the classification criteria are not met
- j) aspiration hazard
Not classified
Based on available data, the classification criteria are not met

11.2. Information on other hazards

Endocrine disrupting properties:

No endocrine disruptor substances present in concentration $\geq 0.1\%$

SECTION 12: Ecological information

12.1. Toxicity

Adopt good working practices, so that the product is not released into the environment.

GEAR BOX GREASE

Not classified for environmental hazards

Based on available data, the classification criteria are not met

12.2. Persistence and degradability

- N.A.
- 12.3. Bioaccumulative potential
N.A.
- 12.4. Mobility in soil
N.A.
- 12.5. Results of PBT and vPvB assessment
vPvB Substances: None - PBT Substances: None
- 12.6. Endocrine disrupting properties
No endocrine disruptor substances present in concentration $\geq 0.1\%$
- 12.7. Other adverse effects
None

SECTION 13: Disposal considerations

- 13.1. Waste treatment methods
Recover if possible. In so doing, comply with the local and national regulations currently in force.
Additional disposal information:
Dispose of waste and waste in accordance with local authority requirements

SECTION 14: Transport information

- 14.1. UN number or ID number
Not classified as dangerous in the meaning of transport regulations.
- 14.2. UN proper shipping name
N.A.
- 14.3. Transport hazard class(es)
N.A.
- 14.4. Packing group
N.A.
- 14.5. Environmental hazards
N.A.
- 14.6. Special precautions for user
N.A.
- 14.7. Maritime transport in bulk according to IMO instruments
N.A.

SECTION 15: Regulatory information

- 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
 - Dir. 98/24/EC (Risks related to chemical agents at work)
 - Dir. 2000/39/EC (Occupational exposure limit values)
 - Regulation (EC) n. 1907/2006 (REACH)
 - Regulation (EC) n. 1272/2008 (CLP)
 - Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013
 - Regulation (EU) n. 2020/878
 - Regulation (EU) n. 286/2011 (ATP 2 CLP)
 - Regulation (EU) n. 618/2012 (ATP 3 CLP)
 - Regulation (EU) n. 487/2013 (ATP 4 CLP)
 - Regulation (EU) n. 944/2013 (ATP 5 CLP)
 - Regulation (EU) n. 605/2014 (ATP 6 CLP)
 - Regulation (EU) n. 2015/1221 (ATP 7 CLP)
 - Regulation (EU) n. 2016/918 (ATP 8 CLP)
 - Regulation (EU) n. 2016/1179 (ATP 9 CLP)
 - Regulation (EU) n. 2017/776 (ATP 10 CLP)
 - Regulation (EU) n. 2018/669 (ATP 11 CLP)
 - Regulation (EU) n. 2018/1480 (ATP 13 CLP)

Regulation (EU) n. 2019/521 (ATP 12 CLP)
Regulation (EU) n. 2020/217 (ATP 14 CLP)
Regulation (EU) n. 2020/1182 (ATP 15 CLP)
Regulation (EU) n. 2021/643 (ATP 16 CLP)
Regulation (EU) n. 2021/849 (ATP 17 CLP)
Regulation (EU) n. 2022/692 (ATP 18 CLP)

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

Restrictions related to the product:

No restriction.

Restrictions related to the substances contained:

No restriction.

Where applicable, refer to the following regulatory provisions :

Directive 2012/18/EU (Seveso III)

Regulation (EC) nr 648/2004 (detergents).

Dir. 2004/42/EC (VOC directive)

Provisions related to directive EU 2012/18 (Seveso III):

Seveso III category according to Annex 1, part 1

None

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for the substance.

SECTION 16: Other information

This safety data sheet has been completely updated in compliance to Regulation 2020/878.

This document was prepared by a competent person who has received appropriate training.

Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre,
Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van
Nostrand Reinold

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

ADR:	European Agreement concerning the International Carriage of Dangerous Goods by Road.
ATE:	Acute Toxicity Estimate
ATEmix:	Acute toxicity Estimate (Mixtures)
CAS:	Chemical Abstracts Service (division of the American Chemical Society).
CLP:	Classification, Labeling, Packaging.
DNEL:	Derived No Effect Level.
EINECS:	European Inventory of Existing Commercial Chemical Substances.
GefStoffVO:	Ordinance on Hazardous Substances, Germany.
GHS:	Globally Harmonized System of Classification and Labeling of Chemicals.
IATA:	International Air Transport Association.
IATA-DGR:	Dangerous Goods Regulation by the "International Air Transport

	Association" (IATA).
ICAO:	International Civil Aviation Organization.
ICAO-TI:	Technical Instructions by the "International Civil Aviation Organization" (ICAO).
IMDG:	International Maritime Code for Dangerous Goods.
INCI:	International Nomenclature of Cosmetic Ingredients.
KSt:	Explosion coefficient.
LC50:	Lethal concentration, for 50 percent of test population.
LD50:	Lethal dose, for 50 percent of test population.
PNEC:	Predicted No Effect Concentration.
RID:	Regulation Concerning the International Transport of Dangerous Goods by Rail.
STEL:	Short Term Exposure limit.
STOT:	Specific Target Organ Toxicity.
TLV:	Threshold Limiting Value.
TWA:	Time-weighted average
WGK:	German Water Hazard Class.

TECHNICAL DATA SHEET

GEAR BOX GREASE

SPECIAL GREASE MADE WITH MOLYBDENUM DISULFIDE

DESCRIPTION

GEAR BOX GREASE is a lithium soap based grease with a special molybdenum disulphide additivition designed to give excellent antiwear and load resistance properties, even in high temperature conditions.

FEATURES

Besides his high EP power, GEAR BOX GREASE, is characterized by a great water and oxidation ressitence and maintain a wide stability range.

Thanks to his sticking power, it ensure an effective and long protection against rust and corrosion.

APPLICATIONS

GEAR BOX GREASE is particulary indicated to lubricate mechanical parts subjected to high pressure or can not be periodically lubricate.

- To lubricate homokinetic joint of cars, chains, brakes, open gearboxes in presence of water, dust, humidity, steam, high temperature and long working cycle.
- To lubricate bearing and mechanical parts hard to reach and can not be periodically lubricated.
- To lubricate threaded connections under stress, for machine tools gimbals, during running in and testing operations and also in normal working.

AVERAGE DATA

NLGI CONSISTENCY	2
Colour	Black
Penetration (mm/10)	265/295
Drip point (°C)	185
Temperature range (°C)	-20/130
Emcor test	0/1
Water Wash Out (ASTM D1264) Weight loss (%)	<6
WBT (ASTM D1263) Weight loss (%) Lubrication	3 max excelent

METHOD OF USE

GEAR BOX GREASE can be applied mauully or with authomatically delivery system.

STORAGE AND HANDLING

Keep the containers closed, indoors, avoiding exposing them to direct sunlight. Avoid freezing. In case of containers rupture, follow the instructions described in the Safety Data Sheet.

Review 02
Date: 09/10/2019

The indications and technical information reported, deriving from severe laboratory tests or reliable applications, as well as any other verbal or written information, provided also at the request of the user, are purely informative. For them, the Company neither requests nor receives consideration and does not in any way engage the responsibility of the Company regarding the suitability of the products for the specific applications the user intends to use.

