SAFETY DATA SHEET

according to 1907/2006/EC, Article 31, Annex II as amended

Grease Gazpromneft Grease LTS Moly EP 2

Revision 1
Revision date 27.12.2017

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY	
1.1. Product Identifier	
Product name	Gazpromneft Grease LTS Moly EP 2
1.2. Relevant identified uses of the substance or mixture and uses advised against	
Description	High performance grease on the basis of lithium-calcium soap with extreme pressure additives (EP additives) and solid filler (molybdenum disulfide).
1.3. Details of the supplier of the safety data sheet	"Gazpromneft – lubricants", Ltd, 14/3 Krzhizhanovskogo str. 117218, Moscow- Russia. Lubricants@gazprom-neft.ru Tel. +7 495 642-99-69 (between 9 AM and 6 PM Moscow time) Fax +7 495 921-48-63
Only Representative	REACHLaw Ltd. Vänrikinkuja 3 JK 21 Espoo FI-02600 Finland Tel. +358(0) 9 412 3055 Email: sds@reachlaw.fi
1.4. Emergency telephone number	1-760-476-3962 (America) 1-760-476-3961 (Europe, Middle East&Africa) 1-760-476-3960 (Asia Pacific): Global Response Access Code: 333497
2. HAZARDS IDENTIFICATION	
2.1. Classification of the substance or mixture	
Regulation (EC) No 1272/2008 (CLP):	Eye Irrit. 2 Causes serious eye irritation. Aquatic Chronic 3 Harmful to aquatic life with long lasting effects.
2.2. Label elements:	
Regulation (EC) No 1272/2008 (CLP):	Pictograms and Signal Words:  **Warning** H319 Causes serious eye irritation. H412 - Harmful to aquatic life with long lasting effects. P273 - Avoid release to the environment. P280 - Wear protective gloves/protective clothing/eye protection/face protection. P337+P313 If eye irritation persists: Get medical advice/attention P501.A Dispose of contents/container in accordance with applicable regulations. P264 Wash hands thoroughly after handling ***Contains:*** Reaction product of 4-methyl-2-pentanol and diphosphorus pentasulfide propoxylated, esterified with diphosphorus pentaoxide, and salted by amines, c-12-14 tert-alkyl; May produce an allergic reaction.

Adverse physicochemical, human health and environmental effects:	No other hazards
Ingredient(s) with unknown acute toxicity:	None

2.3 Other hazards

	No Significant Hazard

Further information

	This substance/mixture does not meet the PBT/vPvB criteria of REACH, annex XIII.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

	Not applicable: this product is regulated as a mixture.

3.2 Mixtures (EC) No 1272/2008

Chemical Name	Index.No	CAS No	EC No	Reach Registration Number	Conc. %w/w	Classification
Base oil - unspecified - lubricating oils	649-484-00-0	74869-22-0	278-012-2	01-2119495601-36-0023	20-30	DECLL(*)
Base oil - unspecified - Residual oils (petroleum), solvent-dewaxed	649-471-00-X	64742-62-7	265-166-0	01-2119480472-38-0023	30-40	DECLL(*)
Lithium 12-hydroxystearate	-	7620-77-1	231-536-5	01-2119970893-23-0019	5-10	Product is not classified
Phosphorodithioic acid, mixed O,Obis(iso-Bu and pentyl) esters, zinc salts	-	-	270-608-0	01-2119493628-22	1-5	Aquatic Chronic 2 H411 Eye Dam. 1; H318 Skin Irrit. 2; H315
Reaction products of 4-methyl-2-pentanol and diphosphorus pentasulfide, propoxylated, esterified with diphosphorus pentaoxide, and salted by amines, C12-14-tert-alkyl	-	-	931-384-6	01-2119493620-38	0.1-1	Acute Tox. 4; H302 Aquatic Chronic 2; H411 Eye Dam. 1; H318 Skin Sens. 1; H317

(*)DECLL Substance classified in accordance with Note L, Annex VI of EC Regulation (EC) 1272/2008.
The classification as a carcinogen need not apply if it can be shown that the substance contains less than 3% DMSO extract as measured by IP 346 "Determination of polycyclic aromatics in unused lubricating base oils and asphaltene free petroleum fractions — Dimethyl sulphoxide extraction refractive index method", Institute of Petroleum, London. This note applies only to certain complex oil-derived substances in Part 3.

Description

	All base oils contained in this product have a value of < 3% w DMSO extract according to IP 346/92.

Further information

	Full text for all Hazard statements, mentioned in this section, are displayed in Section 16.

4. FIRST AID MEASURES

4.1. Description of first aid measures

Inhalation	Remove casualty to fresh air and keep warm and at rest.
Eye contact	After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an opthalmologist immediately. Protect uninjured eye.
Skin contact	Immediately take off all contaminated clothing. Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap.

Skin contact	Wash thoroughly the body (shower or bath). Remove contaminated clothing immediately and dispose off safely. After contact with skin, wash immediately with soap and plenty of water.
Ingestion	Do not induce vomiting, get medical attention showing the SDS and label hazardous.
4.2. Most important symptoms and effects, both acute and delayed	
Eye contact	Eye irritation / Eye damages
4.3. Indication of any immediate medical attention and special treatment needed	
	In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).
5. FIRE-FIGHTING MEASURES	
5.1. Extinguishing media	Use extinguishing media appropriate to the surrounding fire conditions (carbon dioxide (CO_2); dry chemical; foam; sand; water spray). Extinguishing media which must not be used for safety reasons: none in particular.
5.2. Special hazards arising from the substance or mixture	Burning produces irritating, toxic and obnoxious fumes. Combustion products highly dependent on combustion conditions. A complex mixture of airborne solids, liquids and gases including carbon monoxide, carbon dioxide and unidentified organic compounds will be evolved when this material undergoes combustion.
5.3. Advice for firefighters	Wear suitable respiratory equipment when necessary. Do not enter any enclosed or confined fire space without proper protective equipment, including self-contained breathing apparatus.
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. Retain contaminated washing water and dispose it. In case of entry into waterways, soil or drains, inform the responsible authorities. Suitable material for taking up: absorbing material, organic, sand.
6.3. Methods and material for containment and cleaning up	Use appropriate techniques such as applying noncombustible absorbent materials or pumping. Sweep up. Transfer to suitable, labeled containers for disposal. Clean spillage area thoroughly with plenty of water.
6.4. Reference to other sections	See also section 8 and 13
7. HANDLING AND STORAGE	
7.1. Precautions for safe handling	Avoid contact with skin and eyes, inhaltion of vapours and mists. Don't use empty container before they have been cleaned. Before making transfer operations, assure that there aren't any incompatible material residuals in the containers. Contamined clothing should be changed before entering eating areas. Do not eat or drink while working. See also section 8 for recommended protective equipment.

7.2. Conditions for safe storage, including any incompatibilities	Keep in a cool, dry, well-ventilated area. Keep containers tightly closed. Stored in correctly labeled containers.
7.3. Specific end use(s)	No further relevant information available.
8. EXPOSURE CONTROLS/PERSONAL PROTECTION	
8.1. Control parameters	
Base oil - unspecified - lubricating oils	WEL 8-hr limit mg/m^3: 5.4 (aerosol)
8.2. Exposure controls	
8.2.1. Appropriate engineering controls	Material should be handled in enclosed vessels and equipment, in which case general (mechanical) room ventilation should be sufficient. Local exhaust ventilation or adequate ventilation should be used at points where dust, mist, vapors or gases can escape into the room air.
8.2.2. Individual protection measures:	Wear protective clothing. Personal protective equipment should conform to appropriate standards, be suitable for use, be kept in good condition and properly maintained.
Eye/face protection	***Eye protection***: Safety Glasses.
Skin protection-Hand protection	***Protection for skin:*** Use nitrile or neoprene gloves. Long sleeve shirt is recommended. Wear a chemically protective when contact with material may occur. Use neoprene or nitrile rubber boots when necessary to avoid contaminating shoes. Launder contaminated clothing before reuse. ***Protection for hands:*** Use protective gloves that provides comprehensive protection, e.g. P.V.C., neoprene or rubber.
Respiratory protection	Use in ventilated area. Use respirator with a combination organic vapor and high efficiency filter cartridge just if recommended exposure limit is exceeded. Use self-contained breathing apparatus for entry into confined space, for other poorly ventilated areas and for large spill clean-up sites.
Hygienic and Technical measures	Wash thoroughly after handling this product. Do not eat, drink or smoke when using this product.
9. PHYSICAL AND CHEMICAL PROPERTIES	
Appearance	Homogeneous dark-grey paste
Odour	Petroleum odor
pH	Not applicable
Pour point	Not applicable
Initial boiling point and boiling range	Not applicable
Flash point	>200 °C (Cleveland Open Cup, ASTMD 92)
Evaporation rate	Not applicable
Upper/lower flammability	Not determined
Vapour density	Not applicable
Vapour pressure	Not applicable
Relative density	Not determined
Solubility	Soluble in most organic solvents, insoluble in water
Partition coefficient: n-octanol/water	Not determined
Auto-ignition temperature	Not determined
Decomposition temperature	Not applicable

Viscosity	Not applicable
Explosive properties	Not applicable
Oxidizing properties	Not determined
Volatile Organic compounds	Not applicable
Dropping Point	> 180 ^{o}C
Other information	
Miscibility	Not applicable
Conductivity	Not applicable
10. STABILITY AND REACTIVITY	
10.1. Reactivity	This product has no significant hazards with respect to reactivity. Stable under normal conditions
10.2. Chemical stability	Stable under normal conditions. Will not decompose if stored and used as recommended.
10.3. Passivity of hazardous reactions	Will not occur. Stable under normal conditions.
10.4. Conditions to avoid	Elevated temperatures, sparks and open flames.
10.5. Incompatible materials	Strong oxidizing agents.
10.6. Hazardous decomposition products	Burning produces irritating, toxic and obnoxious fumes.
11. TOXICOLOGICAL INFORMATION	
11.1. Information on toxicological effects	
Acute Toxicity	No data available on this product. There is no toxicological data available on the mixture. Consider the individual concentration of each component to assess toxicological effects resulting from exposure to the mixture.
Acute Toxicity of base oils	Acute oral/rat LD_{50} > 5000 mg/kg Acute dermal/rabbit LD_{50} > 2000 mg/kg Acute inhalation/rat LC_{50} > 5000 mg/m^3
Skin corrosion/irritation	Avoid direct contact. Repeated or prolonged skin contact may cause irritation. Contact with heated product may cause thermal burns. Based on data from components or similar materials.
Serious eye damage /irritation	Causes serious eye irritation. The product has not been tested. Evaluation has been made through data of components.
Respiratory or skin sensitization	Contains: reaction product of 4-methyl-2-pentanol and diphosphorus pentasulfide propoxylated, esterified with diphosphorus pentaoxide, and salted by amines, c-12-14 tert-alkyl; May produce an allergic reaction.
Carcinogenicity	The product is not carcinogenic. Evaluation has been made through data of components. Base oils passed the test IP 346 (DMSO extractible compounds less than 3%) (Note H, L).
Germ cell mutagenicity	Not Applicable
Reproductive toxicity	Not Applicable
STOT-single exposure	Not Applicable
STOT-repeated exposure	Not Applicable
Aspiration hazard	Not Applicable
12. ECOLOGICAL INFORMATION	
12.1. Toxicity	Adopt good working practices, so that the product is not released into the environment. Eco-Toxicological Information: *Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment*.

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List of components with eco-toxicological properties

Quantity	Component	Ident. Numb.	Ecotox Infos
30-40 %	Base oil - unspecified - Residual oils (petroleum), solvent-dewaxed	CAS: 64742-62-7 EC: 265-166-0	EL_{50} a) Aquatic acute toxicity Daphnia magna, 48hr> 10000 mg/L 48h NOELR a) Aquatic acute toxicity Algae Algae> 100 mg/L 72h LL_{50} a) Aquatic acute toxicity Fish > 100 mg/L 96h NOELR b) Aquatic chronic toxicity Daphnia magna, 21 days= 10mg/L NOELR b) Aquatic chronic toxicity Fish = 10 mg/L
1-5 %	Phosphorodithioic acid, mixed O,O-bis(iso-Bu and pentyl) esters, zinc salts	EC: 270-608-0	**Fish:** LC_{50} (Rainbow Trout, 4 d): 4.5 mg/l, LC_{50} (Not reported, 4 d): 46 mg/l, NOEC (Rainbow Trout, 4 d): 1.8 mg/l **Aquatic Invertebrates:** EC_{50} (Water flea (Daphnia magna), 2 d): 23 mg/l NOEC (Water flea (Daphnia magna), 2 d): 10 mg/l EC_{50} (Water flea (Daphnia magna), 21 d): 0.8 mg/l **Toxicity to Aquatic Plants:** EC_{50} (Green algae (Scenedesmus quadricauda), 3 d): 24 mg/l NOEC (Green algae (Scenedesmus quadricauda), 3 d): 1.8 mg/l
0.1-1.0 %	Reaction products of 4-methyl-2-pentanol and diphosphorus pentasulfide, propoxylated, esterified with diphosphorus pentaoxide, and salted by amines, C12-14-tert-alkyl	EC: 931-384-6	**Fish:** LC_{50} (Rainbow Trout, 4 Days): 24 mg/l NOEC (Rainbow Trout, 4 Days): 3.2 mg/l LC_{50} (Fathead Minnow, 4 Days): 8.5 mg/l **Aquatic Invertebrates:** EC_{50} (Water flea (Daphnia magna), 2 d): 91.4 mg/l EC_{50} (Water flea (Daphnia magna), 21 d): 0.66 mg/l NOEC (Water flea (Daphnia magna), 21 d): 0.12 mg/l **Toxicity to Aquatic Plants:** EC_{50} (Green algae (selenastrum capricomutum), 4 Days): 6.4 mg/l NOEC (Green algae (selenastrum capricomutum), 4 Days): 1.7 mg/l

12.2. Persistence and degradability	No date is available on this product. Components: Base oil - unspecified - lubricating oils, Base oil - unspecified - Residual oils (petroleum), solvent-dewaxed: Non-readily biodegradable.
12.3. Bio accumulative potential	No date is available on this product.
12.4. Mobility in soil	Product floats on water (insoluble) and can entrape small organisms. The product could easily disperse in soil. Products have not been tested. Evaluation has been made through data of components.
12.5. Results of PBT and vPvB assessment	No PBT Ingredients are present.
12.6. Other adverse effects	No components with environmental hazard properties.

13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Disposal methods	Dispose of in compliance with all local and national regulations. Contact a licensed waste disposal company.
Disposal of packaging	Do NOT reuse empty containers. Empty containers can be sent for disposal or recycling.
Further information	For disposal within the EC, the appropriate code according to the European Waste Catalogue (EWC) should be used.

14. TRANSPORT INFORMATION

Not classified as dangerous in the meaning of transport regulations.

14.1. UN number	Not applicable.
14.2. UN proper shipping name	Not applicable.
14.3. Transport hazard class(es)	Not applicable.
14.4. Packing group	Not applicable.
14.5. Environmental hazards	Marine pollutant: No / Environmental Pollutant: No
14.6. Special precautions for user	Not applicable.

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ADR/RID	The product is not classified as dangerous for carriage.
IMDG	The product is not classified as dangerous for carriage.
IATA	The product is not classified as dangerous for carriage.
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. 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)2015/830 Provisions related to directive EU 2012/18 (Seveso III): German Water Hazard Class. N.A. 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: None
Chemical safety assessment	No data available on this product.
16. OTHER INFORMATION	
Text of Hazard statements in Section 3	H302 Harmful if swallowed. H304 May be fatal if swallowed and enters airways. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H319 Causes serious eye irritation. H411 Toxic to aquatic life with long lasting effects. H412 Harmful to aquatic life with long lasting effects. 3.1/4/Oral Acute Tox. 4 Acute toxicity (oral), Category 4 3.10/1 Asp. Tox. 1 Aspiration hazard, Category 1 3.2/2 Skin Irrit. 2 Skin irritation, Category 2 3.3/1 Eye Dam. 1 Serious eye damage, Category 1 3.3/2 Eye Irrit. 2 Eye irritation, Category 2 3.4.2/1 Skin Sens. 1 Skin Sensitisation, Category 1 4.1/C2 Aquatic Chronic 2 Chronic (long term) aquatic hazard, cat 2
Legend to abbreviations and acronyms used in the safety data sheet:	ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road. AND: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways. CAS: Chemical Abstracts Service (division of the American Chemical Society). CLP: Classification, Labeling, Packaging. DMSO: Dimethyl sulfoxide. EC_{50}: Half Maximal Effective Concentration. EINECS: European Inventory of Existing Commercial Chemical Substances. IATA: International Air Transport Association.

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Legend to abbreviations and acronyms used in the safety data sheet:	IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA). LD_{50}: Lethal Dose to 50 % of a test population. LC_{50}: Lethal Concentration to 50 % of a test population. PBT: Persistent, Bioaccumulative and Toxic substance. STOT: Specific Target Organ Toxicity. vPvB: Very Persistent and Very Bioaccumulative. WEL: Workplace Exposure Limit.

Classification and procedure used to derived the classification for mixture according to Regulation EC 1272/2006 (CLP)

Classification according to Regulation EC 1272/2006 (CLP)	Classification procedure
Eye Irrit. 2 Causes serious eye irritation. Aquatic Chronic 3 Harmful to aquatic life with long lasting effects.	Calculation method.

Further information	The information supplied in this Safety Data Sheet is designed only as guidance for the safe use, storage and handling of the product. This information is correct to the best of our knowledge and belief at the date of publication however no guarantee is made to its accuracy. This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any other process.
Revision 1	This document differs from the previous version in the following areas: 1. Identification of the substance/preparation and the company 3. Composition/information on ingredients. 9. Physical and chemical properties 11. Toxicological information 12. Ecological information 16. Other information.