

MATERIAL SAFETY DATA SHEET (MSDS)



Compagnia Italiana Lubrificanti S.p.A.

MOLYGUARD GS ROLLER DR

Revision nr.5
Dated 19/05/2016
Printed on 20/5/2016
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Safety data sheet

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

1.1. Product identifier

Product name MOLYGUARD GS ROLLER DR

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

Intended use Multifunctional lubricating grease.

Identified Uses	Industrial	Professional	Consumer
Lubrication of bearings and linkages.	✓	✓	-
Uses Advised Against			
Those not listed, without first consulting an expert.			

1.3. Details of the supplier of the safety data sheet

Name Compagnia Italiana Lubrificanti S.p.A.
Full address Largo Domodossola, 7
District and Country 20145 Milano MI
Italia
Tel. +39 02 345531
Fax +39 02 3317891

e-mail address of the competent person responsible for the Safety Data Sheet sds@compagniaitalianalubrificanti.it

Product distribution by COMPAGNIA ITALIANA LUBRIFICANTI SPA

1.4. Emergency telephone number

For urgent inquiries refer to

Poison control center:
AUSTRIA - WIEN +43 1 40 400 2222
BELGIUM - BRUSSELLES +32 70 245 245
BULGARIA - SOFIA +359 2 9154 409
CROATIA - ZAGREB +358 1 2348 342
CZECH REPUBLIC - PRAGA +42 2 2491 9293
DENMARK - COPENAGHEN +45 35 31 54 04
FINLAND - HELSINKI +358 9 471 977
FRANCE - PARIS +33 1 40 05 48 48
GERMANY - BERLIN +49 30 450 653565
GREECE - ATHENS +30 10 779 3777
HUNGARY - BUDAPEST +36 80 20 11 99
ICELAN - REYKJAVIK +354 525 111
SPAIN - BARCELONA +34 93 227 98 33
UNITED KINGDOM - LONDON +44 0870 243 2241

SECTION 2. Hazards identification

2.1. Classification of the substance or mixture

The product is classified as hazardous pursuant to the provisions set forth in EC Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of EC Regulation 1907/2006 and subsequent amendments.

Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

Hazard classification and indication:
Skin sensitization, category 1B H317 May cause an allergic skin reaction.

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SECTION 2. Hazards identification ... / >>

2.2. Label elements

Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

Hazard pictograms:



Signal words: Warning

Hazard statements:
H317 May cause an allergic skin reaction.

Precautionary statements:
P272 Contaminated work clothing should not be allowed out of the workplace.
P280 Wear protective gloves.
P302+P352 IF ON SKIN: Wash with plenty of soap and water.
P333+P313 If skin irritation or rash occurs: Get medical advice / attention.
P362+P364 Take off contaminated clothing and wash it before reuse.

Contains: ALCHILARIL SOLFONATO DI CALCIO A CATENA LUNGA

2.3. Other hazards

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%.

SECTION 3. Composition/information on ingredients

3.1. Substances

Information not relevant

3.2. Mixtures

Contains:

Identification	Conc. %	Classification 1272/2008 (CLP)
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ALCHILARIL SOLFONATO DI CALCIO A CATENA LUNGA		
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CAS	61789-86-4	14 - 16	Skin Sens. 1B H317
EC	263-093-9		

Note: Upper limit is not included into the range

The full wording of hazard (H) phrases is given in section 16 of the sheet.

SECTION 4. First aid measures

4.1. Description of first aid measures

EYES: Remove contact lenses, if present. Wash immediately with plenty of water for at least 15 minutes, opening the eyelids fully. If problem persists, seek medical advice.

SKIN: Remove contaminated clothing. Rinse skin with a shower immediately. Get medical advice/attention immediately. Wash contaminated clothing before using it again.

INHALATION: Remove to open air. If the subject stops breathing, administer artificial respiration. Get medical advice/attention immediately.

INGESTION: Get medical advice/attention immediately. Do not induce vomiting. Do not administer anything not explicitly authorised by a doctor.

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

For symptoms and effects caused by the contained substances, see chap. 11.

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

Information not available

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SECTION 5. Firefighting measures

5.1. Extinguishing media

SUITABLE EXTINGUISHING EQUIPMENT

The extinguishing equipment should be of the conventional kind: carbon dioxide, foam, powder and water spray.

UNSUITABLE EXTINGUISHING EQUIPMENT

None in particular.

5.2. Special hazards arising from the substance or mixture

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

Do not breathe combustion products.

5.3. Advice for firefighters

GENERAL INFORMATION

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

SECTION 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Send away individuals who are not suitably equipped. Eliminate all sources of ignition (cigarettes, flames, sparks, etc.) from the leakage site.

6.2. Environmental precautions

Information not available

6.3. Methods and material for containment and cleaning up

Information not available

6.4. Reference to other sections

Information not available

SECTION 7. Handling and storage

7.1. Precautions for safe handling

Before handling the product, consult all the other sections of this material safety data sheet. Avoid leakage of the product into the environment. Do not eat, drink or smoke during use.

7.2. Conditions for safe storage, including any incompatibilities

Keep the product in clearly labelled containers. Keep containers away from any incompatible materials, see section 10 for details.

7.3. Specific end use(s)

Information not available

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

Information not available

8.2. Exposure controls

Comply with the safety measures usually applied when handling chemical substances.

HAND PROTECTION

In the case of prolonged contact with the product, protect the hands with penetration-resistant work gloves (see standard EN 374).

Work glove material must be chosen according to the use process and the products that may form. Latex gloves may cause sensitivity reactions.

SKIN PROTECTION

Wear category I professional long-sleeved overalls and safety footwear (see Directive 89/686/EEC and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

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SECTION 8. Exposure controls/personal protection ... / >>

EYE PROTECTION

Wear airtight protective goggles (see standard EN 166).

RESPIRATORY PROTECTION

If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, use a mask with a type A filter whose class (1, 2 or 3) must be chosen according to the limit of use concentration. (see standard EN 14387). In the presence of gases or vapours of various kinds and/or gases or vapours containing particulate (aerosol sprays, fumes, mists, etc.) combined filters are required.

Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. The protection provided by masks is in any case limited.

If the substance considered is odourless or its olfactory threshold is higher than the corresponding TLV-TWA and in the case of an emergency, wear open-circuit compressed air breathing apparatus (in compliance with standard EN 137) or external air-intake breathing apparatus (in compliance with standard EN 138). For a correct choice of respiratory protection device, see standard EN 529.

ENVIRONMENTAL EXPOSURE CONTROLS

The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

Product residues must not be indiscriminately disposed of with waste water or by dumping in waterways.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	HAZELNUT
Colour	CHARACTERISTIC
Odour	Not available
Odour threshold	Not available
pH	Not available
Melting point / freezing point	> 300 °C
Initial boiling point	Not available
Boiling range	Not available
Flash point	> 200 °C
Evaporation Rate	Not available
Flammability (solid, gas)	Not available
Lower inflammability limit	Not available
Upper inflammability limit	Not available
Lower explosive limit	Not available
Upper explosive limit	Not available
Vapour pressure	Not available
Vapour density	Not available
Relative density	1,010 kg/l 15°C
Solubility	INSOLUBLE IN WATER
Partition coefficient: n-octanol/water	Not available
Auto-ignition temperature	Not available
Decomposition temperature	Not available
Viscosity	Not available
Explosive properties	Not available
Oxidising properties	Not available

9.2. Other information

VOC (Directive 2010/75/EC) :	0%
VOC (volatile carbon) :	0%

SECTION 10. Stability and reactivity

10.1. Reactivity

There are no particular risks of reaction with other substances in normal conditions of use.

10.2. Chemical stability

The product is stable in normal conditions of use and storage.

10.3. Possibility of hazardous reactions

No hazardous reactions are foreseeable in normal conditions of use and storage.

10.4. Conditions to avoid

None in particular. However the usual precautions used for chemical products should be respected.

10.5. Incompatible materials

Information not available

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SECTION 10. Stability and reactivity ... / >>

10.6. Hazardous decomposition products

Information not available

SECTION 11. Toxicological information

In the absence of experimental data for the product itself, health hazards are evaluated according to the properties of the substances it contains, using the criteria specified in the applicable regulation for classification.

It is therefore necessary to take into account the concentration of the individual hazardous substances indicated in section 3, to evaluate the toxicological effects of exposure to the product.

11.1. Information on toxicological effects

Upon contact with skin, this product causes sensitization (dermatitis). Dermatitis derives from skin irritation on the areas which repeatedly come into contact with the sensitizing agent. Cutaneous lesions may include: erythemas, edemas, papules, vesicles, pustules, scurries, ulcerations and exudative phenomena, whose intensity varies according to illness seriousness and affected areas.

Erythemas, edemas and exudative phenomena prevail during the acute phase. Scurfy skin, dryness, ulcerations and skin thickening prevail during the chronic phase.

SECTION 12. Ecological information

Use this product according to good working practices. Avoid littering. Inform the competent authorities, should the product reach waterways or contaminate soil or vegetation.

12.1. Toxicity

Information not available

12.2. Persistence and degradability

Information not available

12.3. Bioaccumulative potential

Information not available

12.4. Mobility in soil

Information not available

12.5. Results of PBT and vPvB assessment

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%.

12.6. Other adverse effects

Information not available

SECTION 13. Disposal considerations

13.1. Waste treatment methods

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.

Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.

CONTAMINATED PACKAGING

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

SECTION 14. Transport information

14.1. UN number

Not applicable

14.2. UN proper shipping name

Not applicable

14.3. Transport hazard class(es)

Not applicable

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SECTION 14. Transport information ... / >>

14.4. Packing group

Not applicable

14.5. Environmental hazards

Not applicable

14.6. Special precautions for user

Not applicable

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Information not relevant

SECTION 15. Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Seveso Category - Directive 2012/18/EC:
None

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006
None

Substances in Candidate List (Art. 59 REACH)
None

Substances subject to authorisation (Annex XIV REACH)
None

Substances subject to exportation reporting pursuant to (EC) Reg. 649/2012:
None

Substances subject to the Rotterdam Convention:
None

Substances subject to the Stockholm Convention:
None

Healthcare controls

Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected.

15.2. Chemical safety assessment

No chemical safety assessment has been processed for the mixture and the substances it contains.

SECTION 16. Other information

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

Skin Sens. 1B Skin sensitization, category 1B
H317 May cause an allergic skin reaction.

LEGEND:

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- CAS NUMBER: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE NUMBER: Identifier in ESIS (European archive of existing substances)
- CLP: EC Regulation 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation

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SECTION 16. Other information ... / >>

- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX NUMBER: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent bioaccumulative and toxic as REACH Regulation
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration
- REACH: EC Regulation 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA STEL: Short-term exposure limit
- TWA: Time-weighted average exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation
- WGK: Water hazard classes (German).

GENERAL BIBLIOGRAPHY

1. Regulation (EU) 1907/2006 (REACH) of the European Parliament
2. Regulation (EU) 1272/2008 (CLP) of the European Parliament
3. Regulation (EU) 790/2009 (I Atp. CLP) of the European Parliament
4. Regulation (EU) 2015/830 of the European Parliament
5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
6. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
7. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
8. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament
9. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament

- The Merck Index. - 10th Edition
- Handling Chemical Safety
- INRS - Fiche Toxicologique (toxicological sheet)
- Patty - Industrial Hygiene and Toxicology
- N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
- ECHA website

Note for users:

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.

This document must not be regarded as a guarantee on any specific product property.

The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.

Provide appointed staff with adequate training on how to use chemical products.

Changes to previous review:

The following sections were modified:

11

TECHNICAL DATA SHEET (TDS)

TECHNICAL INFORMATION **MOLYguard**

MOLYguard GS ROLLER DR

MOLYguard GS ROLLER DR is a high technology grease suitable for many (and heavy duty) applications. It has an excellent performance at low and high temperatures, maintains its lubricating capacity also in difficult thermic situations, when the traditional greases are instable.

The extremely balanced formulation and a particular thickener allow to MOLYguard GS ROLLER to resist against the aggressive attacks of chemical agents and to the washing-away action of water vapour. It also possesses the outstanding resistance to strong mechanical stress; its chemical-physical structure remains stable also in presence of continuous mechanical stress and high pressures.

Its special additivation protects the lubricated metal surfaces against corrosion and wear, improves the antioxidant and antifricition properties. The superior, compared to the conventional greases, stability allows to

prolong the relubrication intervals and, consenguently, to cut down the time for stop.

The benefits of this product are identified in the combination of technical and economic aspects, resulting from a safe protection of lubricated machinery, avoiding unpleasant breakages and inconveniencies associated with their malfunctioning.

APPLICATION

Thanks to its outstanding properties, MOLYguard GS ROLLER DR can be used in moist or even in wet environment, on bearings or other kinematics (also loaded) subject to low and high temperatures at the same time, as, for example, trolleys that work in refrigerators and in ovens.

Use of MOLYguard GS ROLLER DR is also recommended when you simply want to have more time to other jobs, making less frequent the routine servicing on the machinery.

Physical characteristics (not a specification)

	METHOD	UNIT OF MEASURE	VALUE
Appearance			Smooth homogeneous
Colour	ASTM D 2108		Dark hazelnut
Thickener			Calcium sulfonate
NLGI consistency	ASTM D 217		1/2
Specific gravity at 15°C	ASTM D 1298	Kg/dm ³	0.900
Penetration, worked at 25°C	ASTM D 217	1/10 mm	280/ 310
Penetration, manipulated (10.000 hits) at 25°C	ASTM D 217	1/10 mm	+/-5
Penetration, manipulated (100.000 hits) at 25°C	ASTM D 217	1/10 mm	+/-10
Flash point (base oil)	ASTM D 92	°C	> 220
Drop point	ASTM D 566	°C	> 260
Viscosity base oil at 40°C	ASTM D 445	mm ² /s	240
Water washout (80°)	ASTM D 1264	loss %	< -3
Anticorrosion test	ASTM D 1743	(rating)	Passes (1,1,1)
Operating temperature range		°C	-30 +200 (peak +220)

RECOMMENDATIONS

When the grease goes into contact with the other greases of different types, could be verified the incompatibility between the different thickener substances that would cause a non correct lubrication. In these cases before the application of the new product it is recommended to thoroughly clean the surfaces and kinematics showing residuals of grease. For any question, please contact our Technical Department.