MSDS
Pursuant to Regulation EC No. 19/07/2006

FOR PRODUCT
Grease SOLIDOL
GOST 1033-79

1 Name and composition of product

Product name
Grease SOLIDOL

Composition of product
Universal average-melting lubrication CSS – Fatty solid oils (Solid oils CSS-2; press-solid oil CSS-1)
Lubrication’s basic elements are mixture of petroleum oils with medium viscosity, and which are thickened with calcium soaps, included in natural (flora and fauna) fats with the addition of water, 2.5% for CSS, 3% for CSS-2/1/.

<table>
<thead>
<tr>
<th>Ingredient Name</th>
<th>Concentration, %</th>
<th>CAS No.</th>
<th>EC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lubricating greases</td>
<td>80-90</td>
<td>74869-21-9</td>
<td>278-011-7</td>
</tr>
<tr>
<td>Thickener</td>
<td>10-20</td>
<td>mixture</td>
<td></td>
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</tbody>
</table>

According to criteria in Annex XIII. of EC Regulation this product does not contain persistent substances, bio-cumulative substances and toxic substances or highly persistent substances or bio-cumulative substances.

3 Determination of possible risks
As per level of influence on human organism product is classified to 4-th dangerous class according to GOST 12.1.007: low-hazard substance.

Eyes
Product may cause weak irritant action on mucous tunic.

Skin
Product may cause very weak irritant action on skin.

Respiratory apparatus
Product is not considered as dangerous while inhalation, but may cause insignificant abnormality of neuromuscular excitability while inhalation. It is recommended to avoid long term inhalation of its vapour, smoke and fog.

Internal organs
Product is not considered as dangerous in case of accidental ingress.

4 First Aid

General advice
Avoid contacts with skin, eyes and wear.

Eyes
In case of contact of product with eyes emergent medical aid is usually not necessary. With the view of precaution immediately irrigate eyes with ample quantity of warm water.
Skin
In case of contact of product with skin usually there is no neediness in first aid. With the view of precaution immediately take off dirty clothes and wash skin with warm water and soap. If affection not over and condition getting worse, it is necessary to appeal to doctor.

Respiratory apparatus and Internal organs
In case of inhalation of product usually first aid is not necessary. In case of indisposition aggrieved should be taken to fresh air. If signs and symptoms are remains it is necessary to appeal to doctor.
In case of ingress of product it is necessary to appeal to therapeutist. Do not stimulate vomiting.

Remedies for emergence and special aid
- Water
- Soap
- Cotton, bandage
- Hydrogen peroxide

5 Fire-prevention security measures

Fire risk indicator
Grease in not fire risk and not explosive, and is a combustible material group IV. Flash point of liquid base of grease – more than 210°C.

Fire extinguishing
CO₂, dry chemicals, froth, spray water.

Forbidden fire extinguishing remedies (from security considerations)
Water fire extinguisher following marks:
BB-2, 3, 5, 6, 9, 12.

Fire protection
In case of ignition of stated product in enclosed space or encumbered places do not enter it without safety equipment, including autonomous respiratory system.

Products of combustion
While combustion of product carbon dioxide and water vapors are emerging. When combustion is not complete carbon single-oxide can be emerged.

Remedies for individual protection of firemen
Firemen should be provided with isolated respirators, overalls and masks.

6 Emergency situation security measures

Measures for environmental protection
At accidental spillage product to be collected in separate capacity, place of spillage wipe with dry rags. For liquidation of spillage it is possible to use adsorb substances (sand, sawdust and other binders). Greased ground (sand) and rags to be utilized in established order (burning or using adsorbent).

Personnel safety provision
Contact with eyes and skin to be avoided.

7 Usage and storage of product
Recommended temperature while usage and storage of product is temperature of environment. Maximum working temperature is 70°C. Avoid inhalation of vapors
Conditions and terms of safety storage and transportation of substance

For prevention of risk of electrostatic accumulation before shifting operations all containers and equipment to be tied up and putted on ground. Substance to be stored in enclosed space in manufacturer’s packing. Transportation could be effected by all kinds of transport. At right storage and transportation application time of product is 5 years from manufacturing date.

8 Rules and measures for personnel’s protection

Individual personnel’s protection tools (Eyes)
Despite the fact that usually protection tools are not needed; in precautionary measures it is recommended to use protection glasses while usage of product.

Individual personnel’s protection tools (Skin)
No special protection tools for skin are needed. In precautionary measures, while usage of product to avoid long-run or frequent contract with skin and wear suitable protection clothes.

Individual personnel’s protection tools (Inhalation)
No special protection tools are usually needed. Nevertheless it is necessary to avoid long-run or frequent inhalation of vapour or smoke of product.

Parameters to be under control
It is necessary to control in working area air concentration of oil base of grease (MPC is 5 mg/m³).

Engineering safety measures
Placement where grease is used and stored to be equipped with effective with influx-and-extract ventilation.

9 Physical and Chemical properties

Appearance
Homogeneous ointment from light yellow to dark brown color.

Smell
Specific, not irritant

Dropping point
Not less than 78°C

Flash point of liquid base of grease
Not less than 200°C

Explosive risk
Product does not have explosive properties in temperature range of its usage.

Pour point
Low limit of usage of product is minus 30°C.

Dissolubility
Dissolve in carbon solvents, insoluble in water.

Oxidative properties
In standard storage conditions grease do not oxidize, do not hydrolyze, do not polymerize.

Steam pressure
Steam pressure: less than 0.1 mm millimeter of mercury

10 Stability and reactivity ability
Stability
While storage and transportation rules compliance product decomposition and extraction of dangerous substances is not occur. Decomposition occur only on high temperatures.

Incompatibility
React with strong acids and strong oxidants, for example, with pure oxygen, chlorates, nitrates, peroxides, etc. Avoid contact of product with above mentioned substances.

Dangerous decomposition products
As a result of decomposition exudation of Smoke, carbon monoxide, carbon oxide, aldehydes, volatile low-molecular organic acids and other products of incomplete combustion is possible. Oxides of sulfur, calcium sulphide and oxide could be segregated.

11 Toxicity
Acute toxicity
Inhalation – LD$_{50}$ is not established. Do not cause acute poisoning. At maximum possible concentrations cause generally toxic influence.
At ingress inside: LD$_{50}$ for rats and mice – more than 2000 mg/kg.
On contact with skin: cause moderate skin-resorptive influence.
Local reaction while apply:
- on skin – cause moderate irritation on skin;
- on eyes - cause moderate irritation.
Initiate weak cumulative action.
Initiate weak sensibilizing action.

Chronic toxicity
Initiate weak allergenic action.
Not initiate mutagenic, carcinogenic, embryotoxicity and teratogenic effects.

12 Influence on environment
It is necessary to avoid ingress of product to subsoil, water of open basin, in sewage and soil. Product badly soluble in water, and partly undergo biodegradation. MPC for basin is 0,05 mg/dm$^3$.

13 Utilization instructions
Recycling of wastes
Utilization to be effected on special ground for factory wastes in accordance with requirements of respective normative document of consignee’s country. Product does not contain polychloride biphenyl and chlorine.

Recycling of package
Package of this product to be cleaned or treated as wastes.

14 Information for transportation
Transportation conditions
Land (railroad/road – RID/ADR) – Not regulated for Land Transport
Inland waterways (ADN/ADNR) – Not regulated for Inland Waterways Transport
Sea (IMDG) – Not regulated for sea transport according to IMDG-code
Air (ICAO/IATA) – Not regulated for Air Transport

This product is not classified as “dangerous cargo” for carriage in accordance with Rules for transportation of dangerous cargoes.

This safety data sheet serves to complete but not to replace the technical product sheets. The information contained herein is given in good faith and is accurate to the best of knowledge at the date indicated above. It is understood by the user that any use of the product for purposes other than those for which it was designed entails potential risk. The information given herein in no way dispenses the user from knowing and applying all provisions regulating his activity. The user bears sole liability for the precautions required when using the product. The regulatory texts indicated herein are intended to aid the user to fulfill his obligations. This list is not to be considered complete and exhaustive. It is the user's responsibility to ensure that he is subject to no other obligations than those mentioned.