

Chemical Substance Safety Data Sheet

1. Information on chemical substances and companies

Name of chemical substance : Lion Diffusion Pump Oil S
Code number of chemical substance : 186302
Company name: : Lion Corporation
Planning and Coordination department, Chemicals division
Address: : 1-3-7 Honjyo, Sumida-ku, Tokyo
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2. Information on composition and ingredients

Distinction : Single product
Chemical characteristics :
Chemical name : Alkyl-naphthalene(C:20)
Other names :
CAS No. : 56388-48-8
Chemical Substances Control Law : 4 -315
Dangerous or hazardous components

Chemical name	Content (%)	CAS No.	Chemical Substance Control Law	Classification of danger and harm
Not applicable				

3. Summaries of danger and harm

Most important danger and harm

Human health effects : Might be irritant to the eye, the organ of respiration, or/and the skin.
Environmental effects : May be toxic to aquatic organism.
Physical/chemical danger : Keep away from fire , for this product is flammable.
Specific danger and harm : No available information
Classification of chemical substances : Not corresponding to classification criteria.
Outlines of presumed emergencies : Not applicable

4. First aid

When inhaled : Allow a patient to be moved for fresh air, keep him at rest, and obtain medical assistance if necessary.
When adhered on the skin : Wash well affected area with sufficient water and soap. If any alternation in the appearance is observed, obtain medical assistance if necessary.
When entered in the eye : Flush eyes with clean water at least for 15 minutes and then obtain medical care of the ophthalmologist without delay.
When swallowed : Wash the mouth with plenty of water sufficiently. Provide one or two glasses of water or milk. Obtain medical assistance immediately. Provide nothing orally in case the sufferers are unconscious.
Important signs and symptoms
Protection of people who do first aid : Rescuer should wear appropriate protective gears including rubber gloves and a goggle, etc.
Special notice for doctors : No available information

5. Measures in fire

- Chemicals : Dry chemicals, Bubble fire extinguishing agent for water- soluble liquid, carbon dioxide, sand and sprayable water.
Never use water coming out strongly in a cylinder shape.
- Specific danger and harm : Avoid inhalation of smoke during fire fighting since combustion gas contains toxic gases including carbon monoxide, etc.
- Special fire fighting procedures : Shut off ignition source and extinguish with appropriate extinguishing media. Fire fighting works should be done from windward.
Move away any person other than interested person to safer place.
Try to lower temperature by spraying water over surrounding facilities.
Take appropriate measures to prevent spilled product or chemical substances from entering watercourses or sewers when water is sprayed for fire fighting.
- Protection of fire-fighting person : Appropriate protectors such as gloves, spectacles and masks are required to be used always for fire-fighting works.

6. Measures in leakage

- Personal precaution : Protectors such as gloves, spectacles and masks are required to be used always for any kind of works.
In case of large spill, move away person to safer place.
Use ventilation as much as necessary.
- Environmental precaution : Do not release spilled substances directly into watercourses or sewers.
- Procedures for removal : In case of a small spill, remove a spill by adsorbing into adsorbents (like earth, sand, waste clothes, etc.); then wipe the remaining spill with waste clothes or duster; and wash away by much water.
In case of large spill, dike to prevent from draining, lead it to safer place and recover in suitable containers such as a drum.
- Prevention of secondary hazard : Remove combustible materials nearby immediately, and at the same time, prepare extinguishing media.
Wet floor is slippery and may lead to slip accident, so take care for it.
Do not tread on spill indiscriminately.
Use safe tools that do not make sparks.
Containers packed with recovered spillage must be kept sealed off until disposal.

7. Cautions in handling and storage

Handling

- Technical background : Install facilities for eye wash and body wash near handling places.
- Precaution : Never use fire near the product.
- Precautions for safe handling and use : A workshop is required to be fully ventilated.
Wear such appropriate protectors as spectacles and gloves.
After the handling, wash hands and face, etc. well and gargle.

Storage

- Technical measures : No available information
- Storage condition : Store in sealed containers at a well-ventilated place.
Never use fire near the product.
- Substances that are prohibited to contact with this substance : No available information
- Container/wrapper materials : Use materials corresponding to those of containers for the product.

8. Exposure prevention and protection measures

Facilities	:	a. When vapor, fume or mist develops, install a local exhauster. b. Facilities for washing the eyes and body need to be established nearby a place for handling a product. c. Use explosion-proof instruments and take anti-static electricity measures for facilities.
Allowable concentration	:	Control concentration: Not specified Recommendation of Japan Industrial Hygiene Society (2001 Edition): Not specified Recommendation of ACGIH (2001 Edition): Not specified
Protective tools		
Breathing protection	:	Wear a protective mask for organic solvent if necessary.
Protective tools for hands	:	Wear an impermeable rubber gloves (chemical resistant, oil-resistant and solvent resistant).
Protective tools for eyes	:	Protective spectacles provided with a side-plate (Wear goggles or a face shield if necessary).
Protective tools for skin and body	:	Anti-static electricity long-sleeve working clothes
Hygienic measures	:	

9. Physical/chemical properties

Physical state and appearance	:	Light yellow liquid
Odor	:	Slightly Odor
PH	:	No available information
State change temperature/ temperature range	:	Melting point : Lower than 20
Decomposition temperature	:	No available information
Flash point	:	235 (COC)
Autoignition temperature	:	282
Explosion data	:	No available information
Vapor pressure	:	No available information
Vapor density	:	No available information
Density	:	0.903 ~ 0.906
Solubility	:	Insoluble in water
Ethanol/water partition coefficient	:	No available information
Other data	:	

10. Stability, reactivity

Stability	:	Oxidativeness : None Self-reactivity and explosiveness : None Stability and reactivity : Stable under normal handling condition
Dangerous reaction	:	No available information
Conditions that should be avoided	:	No available information
Materials that should be avoided	:	No available information
Dangerous and hazardous degradation products	:	No available information

11. Information on harm

Acute toxicity	:	LD50>70ml/kg (C16)
Local effects	:	Skin irritation : Became weaker irritant were tested in Rabbits at 4days 0.5ml/20×20mm
	:	Eye irritation : No available information

12. Information on environmental effect

No available information

13. Cautions on disposal

Residual waste:	:	When it is incinerated, ensure it is in compliance with related government requirements and local regulations. When it is disposed as a industrial waste, make a contract with officially recognized traders or disposal dealers for treatment /disposition of industrial waste, who are authorized by prefectural governor, and dispose properly it obeying “Waste Disposal and Public Cleansing Law“ and other related government requirements and local regulations.
Contaminated containers/ wrapping materials	:	When emptied contaminated containers or wrappers are disposed as a industrial waste, remove the remaining content and make a request for the disposal to officially recognized traders or disposal dealers for treatment /disposition of industrial waste, who are authorized by prefectural governor, and dispose properly it obeying “Waste Disposal and Public Cleansing Law “ and other related government requirements and local regulations.

14. Cautions on transportation

International regulation	:	Not applicable
Marine regulation	:	Not applicable
Air regulation	:	Not applicable
UN classification and UN No.	:	Not applicable to UN classification criteria.
Additional restriction	:	Must obey the provisions set in related regulations.
Special safety measures and conditions	:	The absence of container breakage, corrosion, leakage, etc. is confirmed prior to transportation. Eventual falling off of loads should be prevented by avoiding loosening, falling down or damage of loads. This product is classified into the Hazardous Substance, Class 4, Group 4 Petroleum, under Fire Service Law of Japan. According, this product should be transferred by packing into the container and loading procedure defined in the relevant law.

15. The regulations in laws and ordinances

Legal restriction	:	Fire Service Law: Correspond to Class 4 petroleum in Class 4 Hazardous Materials under Fire Service Law of Japan. Industrial Safety and Health Law: The product does not corresponds to the substances required to make notification under this law. Poisonous and Deleterious Substances Control Law: The product does not correspond to the Poisonous and Deleterious Substances. Chemical Substance Control Promotion Law (Pollutant Release and Transfer Register Law):
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The product dose not corresponds to these substances.

16. Other information

Indication by labeling : Not applicable

Restricted matters : “Management of descriptions”

The above information may be revised according to the new findings. The descriptions herein are prepared based on the best materials, information and data available at present but constitute no warranty about the content, physical and chemical properties, danger and health hazard, etc. Cautions and notices are indicated for the normal handling. Take appropriate measures for safety according to the particular use and way in case of special handling. Inquiry about descriptions should be addressed to the Planning Division, Chemical Products Business Headquarters, Lion Corp.