Safety Data Sheet (SDS)

Effective Date: Feb 8, 2019

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY/UNDERTAKING

Material Name : NIGLUBE RM
Recommended Use : Lubricating grease.
Restricted Use : Other than those above.
Manufacturer/Supplier : Nippon Grease Co., Ltd.
1-12-4, Suehiro-cho, Tsurumi-ku, Yokohama, 230-0045, Japan
Telephone/Fax : Sales Planning Division TEL.+81-45-501-0781 FAX.+81-45-504-2213
Emergency Telephone Number : Technical Research Laboratory TEL.+81-78-731-8147
SDS Code : HCS412400200

2. HAZARDS IDENTIFICATION

Classification : This material is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

OSHA HCS Label Elements
Symbol(s) : No symbol
Signal Words : No signal word
Hazard Statement : Not classified under OSHA/HCS2012 criteria.

GHS Classification : NOT HAZARDOUS
GHS Label Elements
Symbol(s) : No symbol
Signal Words : No signal word
Hazard Statement : Not classified under GHS criteria.
GHS Precautionary Statements
Prevention : No precautionary phrases.
Response : No precautionary phrases.
Storage : No precautionary phrases.
Disposal : No precautionary phrases.

Unclassified Hazard Information : Please see Section 4 - 8 before use for Prevention/Response/Storage/Disposal. Used oil may contain harmful impurities.
Unknwon Toxicity : 92.63% of this product is of unknwon acute toxicity.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance or Mixture : Mixture
Chemical Description : Lubricating grease.
Component Information : Base oil 70-80%
Grease thickner (Sodium telephthalamate) 10-20%
Additives <10%
Chemical Formula : Not possible to define.
CAS registry number : Trade secret
Additional Information : If product contained highly refined mineral oil, it contains <3% DMSO-extract, according to IP346.
Classification of components according to GHS : [Chemical Identity/CAS No./Hazard Class (category)/Hazard Statement/Conc.]
Dodecenylsuccinic anhydride/25377-73-5/Skin Irrit. 2, Eye Irrit. 2A/H315,H319/ <2%

The specific chemical identities and percentages of composition have been withheld as trade secrets.

4. FIRST AID MEASURES

General Information : Not expected to be a health hazard when used under normal conditions.
Inhalation : Remove casualty to fresh air and keep at rest in a position comfortable for breathing. Cover with blanket to keep warm and rest in a quiet surrounding. Seek immediate medical advice and attention.
Skin Contact : Wash skin with large amount of water using soap.
Eye Contact : Rinse cautiously with clean water for several minutes. Remove contact lenses, if present and easy to do, and continue rinsing. After rinsing for a minimum of 15 minutes, seek medical advice and attention.
Ingestion : Without inducing vomiting, call a doctor for treatment. If mouth has been dirtied, clean with water.
Most Important Symptoms/Effects, Acute & Delayed : If swallowed, may irritate mucous membrane of stomach and induce vomiting. Inhalation if mist may cause feeling ill. Skin contact and eye contact may cause irritation.
Immediate Medical Attention, Special Treatment : Treat symptomatically. Call a doctor or poison control center for guidance.

5. FIRE FIGHTING MEASURES

Clear fire area of all non-emergency personnel.

Suitable Extinguishing Media	: Concentrated strong liquid in mist and powder forms, carbon dioxide and foam. Use powder and carbon dioxide may be used small fires only. Effective to use foam to shutdown the air in a large fires.
Unsuitable Extinguishing Media	: Do not use water in a jet.
Specific Hazards Arising from Chemicals	: Hazardous combustion products may include: A complex mixture of airborne solid and liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic compounds
Fire fighting instructions	: Water the surrounding equipment to cool them down. Cordon off the affected place and its vicinity to all, except the concerned parties.
Protective Equipment & Precautions for Fighters	: Ensure to wear protective equipment and approach from windward.

6. ACCIDENTAL RELEASE MEASURES

Avoid contact with spilled or released material. For guidance on selection of personal protective equipment see Section 8 of this SDS. See Section 13 for information on disposal. Observe the relevant local and international regulations.

Personal Precautions, Protective Equipment and Emergency Procedures	: Avoid contact with skin and eyes. Prepare suitable equipment and materials.
Environmental Precautions	: Use appropriate containment to avoid environmental contamination. Prevent from spreading or entering drains, ditches or rivers by using sand, earth, or other appropriate barriers. In event of entering in the sea, extend oil fences to prevent from spreading, and sop up with absorbent materials. Use chemicals and/or detergents, they must satisfy technical standards as set by the Ministry of Land, Infrastructure and Transport / Ministry of the Environment.
Methods and Material for Containment and Clean Up	: Promptly remove all ignition sources and stop leakages. In a small leakage, absorb and recover by use of soil, sand, sawdust and waste clothes. In a large leakage, cordon off the danger zone, prevent from entering and enclose it with sand bank and stop outflow. Cover liquid surface with foam, and recover liquid into containers.
Additional Advice	: Local authorities should be advised if significant spillages cannot be contained.

7. HANDLING AND STORAGE

HANDLING

Technical Measures	: In handling this material over the allocated volume, ensure approval to meet requires of the laws. Keep away from heat, sparks, open flames, hot objects. No smoking. Take measures against static discharge. Ensure to wear clothing and shoes made of conductive materials. When fixing or processing machine, it carries out after removing dangerous objects completely. NEVER suck up (siphoning) this material by mouth. Wear suitable protect equipment if skin or eye contact may cause. Seal containers hermetically without handling in violent such as falling, dropping, or jolting.
Ventilation Precautions	: see Section 8
Precautions for Safe Handling	: Use under normal temperature. Prevent from mixing water and impurity. Avoid contact with halogens, strong acids, alkali and oxidizing materials.

STRAGE

Conditions for Safe Storage	: Keep containers tightly closed and in a cool, well-ventilated place away from direct sunlight. It is recommended to lock up storage area. Use properly labelled and closeable containers. Avoid heat, sparks, open flame and static accumulation.
Technical Measures	: All electrical appliances shall be explosion-proof types, and they all must be earthed.
Precautions for Safe Stroage	: Avoid contact and storage in same place with halogens, strong acids, alkali and oxidizing materials.
Recommended Materials	: Storage in original containers. Do not pressurize empty containers. May cause rupture. Do not weld, heat up, drill or cut containers. May ignite the residue and cause explosion.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

If the American Conference of Governmental Industrial Hygienists (ACGIH) value is provided on this document, it is provided for information only.

Equipment	: Seal or install ventilations for mist occurs. Install eye shower and body shower near working site.
Standard Concentration Control	: Not specified
OSHA, Permissible Exposure Limits (PEL)	: Data not available.

Occupational Exposure Limits	: Japan Society for Occupational Health(2012)[1]	Data not available.
	ACGIH(2012) TWA[Inhalable fraction.][2]	Data not available.
Protective Equipment	: Skin protection not ordinarily required beyond standard issue work clothes.	
Respiratory Protection	: No respiratory protection is ordinarily required under normal conditions of use. Use appropriate equipment in response to the circumstances.	
Hand Protection	: Use oil-proof protective hand gloves under prolonged or repeated skin contact.	
Remarks	Where hand contact with the product may occur the use of gloves approved to relevant standards (e.g. Europe: EN374, US: F739) made from the following materials may provide suitable chemical protection. PVC, neoprene or nitrile rubber gloves Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, dexterity. Always seek advice from glove suppliers. Contaminated gloves should be replaced. Personal hygiene is a key element of effective hand care. Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturizer is recommended. For continuous contact we recommend gloves with breakthrough time of more than 240 minutes with preference for > 480 minutes where suitable gloves can be identified. For short-term/splash protection we recommend the same, but recognize that suitable gloves offering this level of protection may not be available and in this case a lower breakthrough time maybe acceptable so long as appropriate maintenance and replacement regimes are followed. Glove thickness is not a good predictor of glove resistance to a chemical as it is dependent on the exact composition of the glove material. Glove thickness should be typically greater than 0.35 mm depending on the glove make and model.	
Eye Protection	: Wear safety glasses or full face shield if splashes are likely to occur.	
Skin and Body Protection	: Use oil-proof/long sleeved clothing under prolonged usage.	
Appropriate Sanitary Measures:	: Remove immediately all contaminated clothing. Contaminated clothing must be laundered before reuse.	

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	: Semi-solid.
Colour	: Orange.
Odour	: Slightly odour.
Odour threshold	: Data not available.
pH	: Not applicable.
Melting point	: Not applicable.
Dropping Point	: 256°C
Initial Boiling Point	: Data not available.
Flash point	: 225°C (SETA)
Evaporation rate	: Data not available.
Flammability (solid, gas)	: Not applicable.
Upper / lower Flammability or Explosion limits	: Typical 1 - 7 %(V) (estimated)
Vapour pressure	: Data not available.
Vapour density	: Data not available.
Density	: Approx. 1g/cm^3 (15°C)
Solubility	: **Water**: Negligible.
n-octanol/water partition coefficient (log Pow)	: Data not available.
Auto-ignition temperature	: Data not available.
Decomposition Temperature	: Data not available.
Kinetic viscosity	: Data not available.(This product is solid.)

10. STABILITY AND REACTIVITY

Chemical Stability	: Stable under normal condition.
Hazardous Reactivity	: Avoid contact with strong oxidizing agent.
Conditions to Avoid	: Avoid contact with halogens, strong acids, alkalis, and oxidizing materials.
Incompatible Materials	: Data not available.
Hazardous Decomposition Products	: Hazardous decomposition products are not expected to form during normal storage. Generates smoke, carbon monoxide, sulfurous acid gas etc. during combustion.

11. TOXICOLOGICAL INFORMATION (3)

Basis for Assessment	Information given is based on data on the components and the toxicology of similar products. Unless indicated otherwise, the data presented is representative of the main component of a whole product, rather than for individual component(s). Individual components contained above cut-off value is described on Section 3.
Acute Toxicity	: Data not available.

Skin Corrosion/Irritation	: Data not available. Practically low toxic.
Serious Eye Damage/Irritation	: Data not available. Temporary irritantation may cause inflammation on mucosa.
Respiratory or Skin Sensitisation	: None known.
Germ Cell Mutagenicity	: None known.
Carcinogenicity	: None known. Not listed as carcinogen on IARC/NTP/ACGIH/ Japan Society for Occupational Health.
Reproductive and Developmental Toxicity	: None known.
Specific target organ toxicity	: None known.

12. ECOLOGICAL INFORMATION (3)

Basis for Assessment	Ecotoxicological data have not been determined specifically for this product. Information given is based on a knowledge of the components and the ecotoxicology of similar products. Unless indicated otherwise, the data presented is representative of the main component of a whole product, rather than for individual component(s). Individual components contained above cut-off value is described on Section 3.
Toxicity	: No information. Poorly soluble mixture. May cause physical fouling of aquatic organisms.
Mobility	: No information.
Persistence/degradability	: No information.
Bioaccumulative Potential	: No information.
Hazardous to ozone layer	: Not classified because this product not contained substances listed on Montreal Protocol and Ozone Layer Protection Law.

13. DISPOSAL CONSIDERATIONS

Material Disposal

1 Waste disposal yourself or entrust the industrial waste treatment company who obtained the prefectural governor's permission or municipal corporation. Disposal should be in accordance with applicable regional, national, and local laws and regulations.
2 Do not dispose into the environment, in drains or in water courses.
3 For landfill disposal, destroy by fire and confirm cinders agreed to Waste Disposal
4 Law.
In event of burning this material, ensure to carryout work in safe place with guards in position, and select a method that would not cause any harm or damage to others during combustion or explosion.

Container Disposal : Purify and recycle or performs suitable disposal in accordance with the standard of related laws and regulations. Disposal with remove content completely.

14. TRANSPORT INFORMATION

International Restriction

UN Class, Shipping Name	: Not Dangerous Goods.
UN Number	: Not applicable.
Specific safety measures and conditions for transportation	1 Caution: Flammable. 2 Transport remarkably with containers may not cause friction or agitation. 3 Display signage on vehicle and provide with fire fighting equipment, if and when required to transport more than the specified quantity. Total piled height of vehicle shall be less than 3 meters. 4 Abide by other laws and regulations that are applicable.

15. REGULATORY INFORMATION

TSCA (USA)	: All components listed or in compliance.
METI (JAPAN)	: All components listed or in compliance.
SARA 304 EHS RQ	: This material does not contain any components with a section 304 EHS RQ.
SARA 302	: No chemicals in this product are subject to the reporting requirements of SARA Title III, Section 302.
SARA 313	: This product does not contain any chemical components that exceed the threshold reporting levels established by SARA Title III, Section 313.
California Prop 65	: This product contain as belows. 2-Mercaptobenzothiazole (CAS No. 149-30-4) <0.05% C.I. Solvent Yellow 14 (CAS No. 842-07-9) <0.05% Propylene Oxide (CAS No.75-56-9) <1ppm(as impurity)

16. OTHER INFORMATION

- Subscribe "%" in this document means weight percentage.

[Quotation]

1. Recommendation of Occupational Exposure Limits (2012), Japanese Society of Occupational Health
2. Thresholds limit values for chemical substances and physical agents and biological exposure indices, ACGIH (2012)
3. SDS of EU suppliers (2010-2012)

[Reference]

- Globally Harmonized System of Classification and Labelling of Chemicals (GHS) 4th revised edition, UNITED NATIONS(2011)
- Japanese Standards Association (JSA), JIS Z 7253:2012, JIS Z 7252:2014
- National Institute of Technology and Evaluation (nite), "GHS Information"
- Ministry of Economy, Trade and Industry, Chemical Management site.
- Ministry of Health, Labour and Welfare, "Label and MSDS information for GHS model"