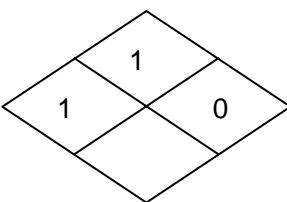


Material Safety Data Sheet

MSDS No. 009-005-02

Health	<div style="text-align: center;"> Fire  </div>	Reactivity	NFPA Hazard Rating 4 – Extreme 3 – Height 2 – Moderate 1 – Slight 0 – Insignificant
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1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: NSK GREASE LR3
 Product Type: Lubricating Grease
 Company Name: NSK Ltd.
 Address: Nissei Bldg., 1-6-3, Ohsaki, Shinagawa-Ku, Tokyo, 141-8560, Japan
 Emergency Telephone Number: +81-3-3779-7253
 Fax Number: +81-3-3779-7644

2. COMPOSITION / INFORMATION ON INGREDIENTSCHEMICAL FAMILY : Lubricating Grease.FORMULA : not applicableCOMPONENTS:

NAME	CONTENTS (%)
Base oil (Synthetic ester oil)	70 – 80
Thickener (Lithium soap)	20 – 30
Additives (Containing barium compound)	<5

HAZARDOUS INGREDIENTS

NAME	CAS No.	CONTENTS (%)
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See Section 8 for exposure limits (if applicable)

3. HAZARDOUS IDENTIFICATIONCLASS NAME OF HAZARDOUS CHEMICALS FOR SDS IN JAPAN

Not applicable

· PHYSICAL AND CHEMICAL HAZARDS:

Not applicable

· ADVERSE HUMAN HEALTH EFFECTS: Prolonged and repeated contact may cause skin irritation.

· ENVIRONMENTAL EFFECTS: No data available.

4. FIRST AID MEASURES

EYES: Immediately flush with water for at least 15 minutes. Get medical attention.

SKIN: Remove excess with cloth or paper and wash area thoroughly with soap and water.

INGESTION: Consult a physician. Do not induce vomiting.

INHALATION: Keep the victim warm and quiet. Remove the victim from the contamination immediately to fresh air.

NOTE TO PHYSICIANS: Supportive care. Treatment based on judgment of the physician in response to reactions of the patient.

5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES:

·FLASH POINT: 225 °C

METHOD : Seta Flash Method

·FLAMMABLE LIMITS: LFL: N/A

UFL: N/A

·AUTOIGNITION TEMPERATURE: No data available

·HAZARDOUS DECOMPOSITION PRODUCTS: Thermal decomposition and combustion may produce carbon monoxide and/or carbon dioxide.

* N/A: Not applicable.

EXTINGUISH MEDIA: Dry chemical, Water fog, CO₂, Foam, Sand/Earth

FIRE FIGHTING INSTRUCTIONS: Dense smoke. Fire fighter wear an approved self-contained breathing apparatus. Do not use water except fog.

6. ACCIDENTAL RELEASE MEASURES

PROCEDURE FOR CLEAN-UP: Transfer bulk of mixture into another container. Absorb residue with an inert material such as earth, sand and vermiculite.

Sweep up and dispose solid waste in accordance with local, state and federal regulations.

WASTE DISPOSAL: Dispose of in accordance with all applicable federal, state and local regulations.

7. HANDLING AND STORAGE

HANDLING: Contact with eye may cause irritation. Use protective glasses or other devices to avoid contact with eyes. Contact with skin may cause irritation. Use protective gloves to avoid skin contact. Do not swallow. (Eating product cause diarrhea and vomiting.) Wear gloves to avoid injury on hands at opening the container. Keep out reach of children.

STORAGE: Keep container closed until ready for use. Storage away from fire source or sunlight and in cool dry area.

8. EXPOSURE CONTROLS/PERSONAL PROTECTIONCONTROL PARAMETERS: noneENGINEERING MEASURES: nonePERSONAL PROTECTIVE EQUIPMENT:

- RESPIRATORY PROTECTION: Wear a gas mask (for organic gas), if necessary.
- EYE PROTECTION: Chemical safety goggles and if handled hot, full face shield.
- HAND AND BODY PROTECTION: Protective gloves, rubber or plastic oil resistant.
- OTHER PROTECTIVE EQUIPMENT: none

9. PHYSICAL AND CHEMICAL PROPERTIES

- | | | | |
|---------------------------------------|-------------------|-------------------------|--------------|
| • APPEARANCE: | Peach white paste | • ODOR : | Slight odor. |
| • VAPOR PRESSURE: | N/A | • VAPOR DENSITY(AIR=1): | N/A |
| • SPECIFIC GRAVITY(H ₂ O): | 0.98 | • EVAPORATION RATE | Slower |
| • SOLUBILITY IN WATER | Negligible | (n-Butyl Acetate=1) | |
| • SOLUBILITY IN ----- : | N/A | • FREEZING POINT : | N/A |
| • PH : | N/A | • VISCOSITY : | N/A |
| • BOILING POINT : | N/A | | |
| • MELTING POINT(Dropping Point): | 205 °C | | |
- * N/A: Not applicable.

10. STABILITY AND REACTIVITY

- STABILITY: (CONDITION TO AVOID) Product is stable under normal condition.
Avoid over heating.
- INCOMPATIBILITY: (SPECIFIC MATERIALS TO AVOID) Strong oxidizers such as hydrogen peroxide, bromine, and chromic acid.
- HAZARDOUS DECOMPOSITION PRODUCTS: Oxide of nitrogen, lithium, barium, sulfur.
- HAZARDOUS POLYMERIZATION: none
- REACTIVITY WITH WATER: none

11. TOXICOLOGICAL INFORMATION

- CORROSIVE AND IRRITANT PROPERTIES : No data available
- ALLERGENIC AND SENSITIZING EFFECTS : No data available
- ACUTE TOXICITY : No data available
- SUB-CHRONIC TOXICITY : No data available
- CHRONIC TOXICITY: Prolonged and repeated skin contact may cause irritation.
- CARCINOGENIC EFFECT : Not listed IARC, NTP, ACGIH.
- MUTAGENIC EFFECTS : No data available
- EFFECTS ON THE REPRODUCTIVE SYSTEM: No data available
- TERATOGENIC EFFECTS : No data available

12. ECOLOGICAL INFORMATION

- BIODEGRABILITY : No data available
- BIOACCUMULATION : No data available
- FISH TOXICITY : No data available

13. DISPOSAL CONSIDERATION

WASTE DISPOSAL METHOD: Incinerate in accordance with applicable regulation.

ATTENTION: Do not use pressure to empty this container. When empty, container may have vapor or product residue. Do not cut, puncture or weld on near the drum.

14. TRANSPORT INFORMATION

- DOT : Not applicable
- UN No. : Not applicable
- FIRE SERVICE LAW (JAPAN) : Not applicable
- LAND(RID/ADR) : Not regulated for rail/road transport
- SEA(IMO/IMDG) : Not regulated for sea transport
- AIR(ICA/O/IATA) : Not regulated for air transport

15. REGULATORY INFORMATION

Regulatory information with regard to this product in your country or your region should be examined by your own responsibility.

CEPA (Canadian Environmental Protection Act) and US TSCA (Toxic Substances Control Act):

All components of this product except for a synthetic ester oil are listed on the Canadian DSL (Domestic Substances List). All components of this product are listed on the TSCA inventory of Chemical Substances.

Canadian WHMIS Classification: Non-hazardous.

US OSHA (Occupational Safety and Health Act):

This product is not hazardous according to the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

US CERCLA (Comprehensive Environmental Release, Compensation & Liability Act):

This product contains no CERCLA Hazardous Substances.

US SARA (Superfund Amendment & Reauthorization Act) Title III:

This product contains no Extremely Hazardous Substances.

SARA Hazard Categories (311/312): None

SARA Toxic Release Inventory (TRI) (313): Barium compounds (0.3—0.7%)

16. OTHER INFORMATION

INFORMATION CONTACT:

Company Name: NSK Ltd.

Address: Nissei Bldg., 1-6-3, Ohsaki, Shinagawa-Ku, Tokyo, 141-8560, Japan

Emergency Telephone Number: +81-3-3779-7253

Fax Number: +81-3-3779-7644

REFERENCE:

CMA Interim Guideline for the Preparation of MSDS.

Chapter 7: MSDS Examples.

ACGIH Threshold Limit Values for Chemical Substances in the Work Environment. (2007)

This MSDS is an addition and complementary document beside the technical data sheet.

The information is based upon our knowledge about the product at the date of edition. Since we cannot anticipate or control the different conditions under which these information or our product may be used, we make no guarantee that recommendations will be adequate for all individuals and situations.