SAFETY DATA SHEET

1. Identification

Product identifier: **FS2**
Recommended use of the chemical and restrictions on use:
Lubricating grease
Manufacturer
Name: LUBE corp
Address: HORIZON1,3-30-16,NISHIWASEDA,SHINJUKU-KU,TOKYO, 169-0051 JAPAN
TEL: +81(0)3-3204-8431
Emergency phone number: +81(0)296-75-4611

2. Hazards identification

GHS Classification
Physical Hazards : Classification not possible
Health Hazards
Acute toxicity - Oral : Not classified
Environment Hazards
Hazardous to the aquatic environment (Acute hazard) : Category Acute 3
OSHA Defined Hazards: (Pyrophoric gas, Simple asphyxiant, Combustible dust) : Classification not possible

GHS Labeling Elements
Symbol: Not applicable.
Signal Word: Not applicable.
Hazard Statements:
(H402) Harmful to aquatic life
Precautionary Statements
Prevention:
(P273) Avoid release to the environment.
Response:
Not applicable.
Storage:
Not applicable.
Disposal:
(P501) Disposal should be in accordance with applicable regional, national and local laws and regulations.

Hazards Not Otherwise Classified(HNOC)
・Not applicable.

3. Composition/ information on ingredients

Formula: Not applicable.

Components:

Component	Contents(%)
Base oil(Refined mineral oil)	80-90
Thickener(Lithium soap)	< 10
EP additive(Molybdenum compounds, zinc compounds)	< 5
Additive(s)(Containing zinc compounds)	< 5

Hazardous Ingredients:

Component	CAS No.	Contents(%)
Molybdenum compounds	Mixture	1-3
Zinc compounds	Mixture	2-5

See Section 8 for exposure limits (if applicable).
See Section 15 for legal controlled substance (if applicable).

4. First-aid measures

Eye Contact:
- Immediately flush with water for at least 15 minutes. Get medical attention.

Skin Contact:
- Thoroughly remove with cloth or paper and wash carefully with soap and water.

Inhalation:
- Remove the victim from the contamination to fresh air. Cover the victim in a blanket to keep warm and quiet. Consult a physician.

Ingestion:
- Do not induce vomiting. Immediate consult a physician.

Notes to Physicians:
- Supportive care. Treatment based on judgment of the physician in response to reactions of the patient.

5. Fire-fighting measures

Flammable Limits: No data available.
Autoignition Temperature: No data available.

Extinguishing Media:
- Foam, dry chemical, CO2, dry sand.

Unsuitable Extinguishing Media:
- Do not use water. Water can be dangerous possibly leading to fire spread.

Specific Hazards with Regard to Fire-fighting:
- Thermal decomposition and combustion may produce carbon monoxide and/or carbon dioxide.

Specific Methods of Fire-fighting:
- In the early stages of fire, use dry chemical, CO2, dry sand, etc. fire-extinguisher.
- In case of massive fire, use foam fire-extinguisher to shut off the air supply.
- Get all persons to safety. Authorized personnel only at the fire site.

Protection of Firefighters:
- Fire-fighters should wear protective equipment.
- Start fire fighting from the windward side.

6. Accidental release measures

Personal Precautions:
- Wear protective equipment during cleanup work.

Environmental Precautions:
- Prevent spills from entering sewers or waterway.

Methods for Clean-Up:
- Collect spillage into a chemical waste container with a cover for disposal. For small spills, wipe off with a solvent (e.g., kerosene).

Prevention of Secondary Hazards:
- Immediately shut off all sources of ignition.

7. Handling and storage

Handling

Technical Measures:
- Handle the product in a well-ventilated place. Do not leak, flood or scatter the product to prevent unwanted evaporation.

Precautions:
- Contact with eye may cause irritation. Use protective glasses to avoid contact with eyes.
- Contact with skin may cause irritation. Use protective gloves to avoid skin contact.
- Do not swallow. (Drinking the product may cause diarrhea and vomiting.)
- Close container after each use.

Precautions for Safe Handling:
- Wear gloves to avoid injury on hands at opening the container.

Storage

Appropriate Storage Conditions:
- Keep container closed to protect from dust/water ingress after use.
- Store in a cool, dry place, away from direct sunlight, heat source and fire.
- Keep out of reach of children.

Safe Packaging Materials:
- Do not expose empty container to pressure.
- Do not weld, heat, drill or cut container. Residue ignition and explosion hazards.

8. Exposure controls/personal protection

Exposure Guidelines

ACGIH
- Mineral oil: TWA 5mg/m3

Engineering Controls:
- When vapor or mist exhales, install an apparatus to close the vapor/mist source or ventilation equipment.

Protective Equipment

Respiratory Protection:
- Wear a gas mask for organic gas when needed (not necessary under normal conditions).

Hand Protection:
- Wear oil-resistant protective gloves in case of prolonged and/or repeated skin contact.

Eye Protection:
- Wear chemical safety goggles whenever the product splashes.

Skin and Body Protection:
- Wear long-sleeved oil-resistant working clothes whenever handling for many hours and/or getting wet. Immediately take off the wet clothes and thoroughly wash them before reusing.

9. Physical and chemical properties

Appearance	
Form	: Semi-solid
Color	: Green
Odor	: Slight odor
pH	: Not applicable.
Melting point	: No data available.
Flash point	: >200°C(Seta)
Vapor pressure	: No data available.
Solubility in water	: Insoluble in water
Vapor density	: No data available.
Density	: 0.91(25°C)g/cm3
Partition coefficient: n-octanol/water	: No data available.
Viscosity	: Not applicable.
Dropping point	: >180°C

10. Stability and reactivity

Reactivity, Conditions to avoid:
- Avoid contact with strong oxidant.

Chemical Stability:
- Product is stable under normal conditions.

Possibility of Hazardous Reactions:
- Not available.

Materials to avoid:
- Strong oxidizers.

Hazardous Decomposition Products:
- This material is expected to be stable under normal conditions of use.

11. Toxicological information

Information on the likely routes of exposure: Not applicable.

Delayed and immediate effects and also chronic effects from short- and long-term exposure

Acute toxicity - Oral:
- Not classified based on the category of each ingredient or the product properties.
- Refined mineral oil LD50 Acute oral >5 g/kg (rat)

Acute toxicity - Dermal: No data available.

Acute toxicity - Inhalation (Gases): No data available.

Acute toxicity - Inhalation (Vapors): No data available.

Acute toxicity - Inhalation (Dusts and mists): No data available.

Skin corrosion/irritation: No data available.

Eye damage/irritation: No data available.

Sensitization - Respiratory: No data available.

Sensitization - Skin: No data available.

Germ cell mutagenicity: No data available.

Carcinogenicity: No data available.

Toxic to reproduction: No data available.

Effects on or via lactation: No data available.

Specific target organ toxicity (Single exposure):
No data available.

Specific target organ toxicity (Repeated exposure):
No data available.

Aspiration hazard: No data available.
Other Toxicity Information
NTP Report on Carcinogens: Not listed.
IARC Monographs: Not listed.

12. Ecological information

Ecotoxicity
Hazardous to the aquatic environment (Acute hazard):
- Classified under Category Acute 3 based on the category of each ingredient or the product properties.

Hazardous to the aquatic environment (Long-term hazard):
No data available.
Persistence and Degradability: No data available.
Bioaccumulative potential: No data available.
Mobility in soil: No data available.
Hazardous to the ozone layer: No data available.

13. Disposal considerations

Waste Residues:
- Properly dispose of in accordance with any relevant regulations.
- Properly dispose of by a licensed waste disposer.
- For in-house incineration disposal, ensure exhaust gas treatment (washing treatment, etc.) to prevent air pollution from sulfur oxides.
- No dumping.
- When burning, be sure to do so on someone’s watch in a safe place and in the way that burning and/or explosion will never pose a potential hazard.

Contaminated Packaging:
- Dispose of container after completely removing the contents.

14. Transport information

DOT Hazardous Materials: Not applicable.
UN Transport of Dangerous Goods
UN Number: Not applicable.
UN Proper Shipping Name: Not applicable.
Transport Hazard Class: Not applicable.
Packing Group: Not applicable.
Land(RID/ADR): Not applicable.
Sea(IMO/IMDG): Not applicable.
Air(ICAO/IATA): Not applicable.
Specific Precautionary Transport Measures and Conditions:
- Contains combustible liquid. Keep fire away.
- Handle with care to prevent container damage.
- Ensure proper packaging before shipping to avoid load shifting and falling accident.

15. Regulatory information

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

US TSCA (Toxic Substances Control Act)
All components of this product are listed on the TSCA inventory of Chemical Substances.

US OSHA (Occupational Safety and Health Act):
This product is hazardous according to the OSHA Hazard Communication Standard, 29 CFR 1910.1200, since this product contains OSHA Hazardous Substances;

Name	CAS No.	Contents(%)
Molybdenum compounds	Mixture	1-3
Zinc oxide	1314-13-2	0.1-0.5

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

Name	CAS No.	Contents(%)
Zinc compounds	Mixture	2-5

US SARA (Superfund Amendment & Reauthorization Act) Title III:
SARA Extremely Hazardous Substances (302): None

SARA Hazard Categories (311/312): None

SARA Toxic Release Inventory (TRI) (313):

Name	CAS No.	Contents(%)
Zinc compounds	Mixture	2-5

16. Other Information

NFPA
Health hazards: 1
Flammability: 1
Instability: 0
Special Hazard: -

Contact Information
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Original date: Oct/31/2014
Revision date: / /

References

1. OSHA Hazard Communication Standard 29 CFR 1910.1200
2. Thresholds limit values for chemical substances and physical agents and biological exposure indices, ACGIH(2012)
3. IARC MONOGRAPHS ON THE EVALUATION OF THE CARCINOGENIC RISK OF CHEMICALS TO HUMANS VOLUME 33
4. Report on Carcinogens Twelfth Edition 2011, NTP
5. EU CLP Regulation (EC No 1272/2008 ANNEX VI Harmonised classification and labelling for certain hazardous substances)
6. Globally Harmonized System of Classification and Labelling of Chemicals (GHS) Third revised edition.

Disclaimer

This SDS 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.