

SAFETY DATA SHEET

Revised: March 23, 2018

Prepared: March 25, 2013

1. Identification

Product name: **HI-LUBE FG-1338-1**

Supplier's details :

Company name : HARVES Co., Ltd.
Address : PARK SIDE GAKUYA bldg. 6F, 9-21-14, Tokiwa, Urawa-ku,
Saitama-shi, Saitama, 330-0061 Japan
Section : Quality Assurance Dept.
TEL : +81-48-824-2821
FAX : +81-48-824-2826

2. Hazards identification

Title of classification: Classification standard not applicable.

GHS classification: Not applicable.

Signal word: None.

Hazard statement: When heated at a very high temperature, there may be produced hydrogen fluoride, perfluoroisobutylene and other poisonous decomposition products.

3. Composition/information on ingredients

Chemical identity: Mixture

| Components: | <u>Contents (mass%)</u> | <u>CAS No.</u> |
|-----------------------------------|-------------------------|----------------|
| Base oil PERFLUOROPOLYETHER | 70~80 | Nondisclosure |
| Thickener POLYTETRAFLUOROETHYLENE | 20~30 | Nondisclosure |
| Total | 100 | |

4. First aids measures

Eye: Immediately rinse the eyes with a quantity of clean water, and receive treatment from a doctor.

Skin: Wash the affected area with soap and water.

Inhalation: When symptoms appear, move the patient to a place of fresh air.

If the symptoms last, receive treatment from a doctor.

Ingestion: Do not induce vomiting and consult a doctor.

Wash mouth thoroughly with plenty of water if necessary.

Remarks: Considered that the product does not stimulate to the eyes, skin and respiratory system. The pollutants that may be contaminated during use are not taken into consideration. The foregoing first aids are the basic measures for removing foreign matters from eyes or skin.

5. Fire-fighting measures

Extinguish method: When fire is strong enough to threaten thermal decomposition of the product, wear complete protecting clothing including helmet, self respirator, fireproof clothing, protective bands for arms, body and legs, and head protective device. It is considered that there will be no anomalous effects during extinguishing activities. Avoid inhaling decomposition products generated by fire. When exposed to flames, spray water to cool the container and thus prevent bursting.

Fire extinguishing agent: Nonflammable.

Remarks: When exposed to an extremely high temperature, poisonous thermal decomposition products including hydrogen fluoride may be produced.

6. Accidental release measures

Remove fire from the environment.

Absorb spill with rag, etc. and place in a chemical waste container.

7. Handling and storage

Handling: Use in well-ventilated areas. Do not inhale vapor for a long time. Do not inhale thermal decomposition products. (Do not use in rooms where a kerosene stove or a gas stove is installed.) Do not smoke in working places. Smoking is allowed after washing hands well after work. Do not smoke cigarette that the product adhered to.

Intake prevention: While in use of the product, eating, drinking or smoking is prohibited. Places adhered to the product should be thoroughly washed with soap and water. Not the expected route of exposure.

Storage: Store in an ordinary storage.

Explosion protection: Nonflammable.

Remarks: Keep the product from being exposed to a high temperature exceeding 200°C.

8. Exposure controls/ personal protection

Control concentrations: Not established.

Allowable concentrations: Not established.

Equipment measures: Use in a well-ventilated place. When ventilation is not satisfactory, use adequate respiratory protective devices.

Protective devices and individual protection:

Respiratory protective devices: Not necessary in case of normal handling.

Protective goggles: Wear protective eyeglasses or chemical safety goggles if oil mist generated.

Protective gloves: Wear oil-resistant gloves when prolonged or frequently repeated contact could occur.

Protective clothing: Not necessary in case of normal handling.

9. Physical and chemical properties

| | | |
|------------------|---|------------------------------|
| Appearance, etc. | : | White Paste. |
| Dropping point | : | None. |
| Evaporation | : | None |
| Water solubility | : | Not soluble. |
| Flash point | : | None. |
| Density | : | Approx. 1.9g/cm ³ |

10. Stability and reactivity

| | | |
|----------------------------------|---|--|
| Flash point: | : | None. |
| Combustibility | : | Nonflammable. |
| Substances to be avoided | : | Stable to most chemicals including strong acid, strong alkali and halogen. |
| Poisonous decomposition products | : | Reference "Harmfulness Information" |
| Stability | : | Stable. |
| Reactivity | : | Dangerous polymerization not occurring. |

11. Toxicology information

Eye: Considered little stimulation to eyes.

Skin: Considered little stimulation to skin.

Inhalation: Considered no harm if thermal decomposition due to overheat does not occur.

Ingestion: Little possibility of swallow of the product. It is considered no harm.

Other harmful information: Temporary thermal decomposition products of the product are hydrogen fluoride and per fluorinated acid fluorides.

At the temperature of 250°C or higher, perfluoroisobutylene may be produced through thermal decomposition of the product. The proportion of generating perfluoroisobutylene is 1/1000 or less of the proportion of generating primary thermal decomposition products.

12. Ecological information

Ecological toxicity: This substance of low solubility shows no toxicity to aquatic microorganisms.

13. Disposal considerations

Method of discard: Adequately dispose in the respective company according to the control of the rules and regulations concerned, or entrust to an industrial waste contractor. Recycle, if possible.

14. Transport information

UN No.: Not applicable.

UN Classification (IMO): Not applicable.

UN Classification (ICAO): Not applicable.

IATA: Not applicable.

Cautions: Refer to the general cautions noted in “Cautions for handling and storage”.

15. Regulatory information

Control under Japanese domestic law (main rules and regulations): Not applicable.

16. Other information

Reference : JIS Z 7252 : 2014

JIS Z 7253 : 2012

Japan Society for Occupational Health (2010)

ACGIH(2013)

CLP Regulation

Remarks : Assessment of danger and harmfulness is not always satisfactory, and so utmost care should be exercised for handling.

This Data Sheet is prepared based on JIS Z 7253:2012 and intended to provide the optimum information and updated data for adequately using and handling the product under proper conditions. It is no guarantee of the noted data and assessment.