

SAFETY DATA SHEET

OUR REF No. III-716

1. IDENTIFICATION OF THE PRODUCT AND OF THE SUPPLIER

【PRODUCT NAME】 HANARL FL-778
【USE OF THE CHEMICAL】 Lubricant
【MANUFACTURER NAME】 Kanto Kasei Ltd.
【MANUFACTURER ADDRESS】 1-8-1, Marunouchi, Chiyoda-ku, Tokyo JAPAN, 100-0005
【DIVISION】 Chemical Safety Division
【PHONE NUMBER】 TEL: 03(3218)7111 FAX: 03(3218)7100
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2. HAZARDS IDENTIFICATION

CLP REGULATION (EC) No 1272/2008

CLASSIFICATION:

The product is not classified as hazardous pursuant to the provisions set forth in EC Regulation 1272/2008 (CLP) (and subsequent amendments and supplements).

Hazard classification and indication: Not applicable

LABEL ELEMENTS

Hazard pictograms: Not applicable
 Signal words: Not applicable
 Hazard statements: Not applicable
 Precautionary statements: Not applicable

This product is not subject to hazard labeling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

3. COMPOSITION/INFORMATION ON INGREDIENTS

DISTINCTION

(SINGLE PRODUCT/MIXTURE) : Mixture
 CHEMICAL NAME : Dry film lubricant
 COMPOSITION : Fluorinated solvent 90~99wt%
 : Fluoric oil, solid lubricants and others 1~10wt%
 CHEMICAL FORMULAE : Not disclose, because of trade secrets
 CAS NO : Not disclose, because of trade secrets
 UN CLASS/UN NUMBER : Not applicable

4. FIRST-AID MEASURES

IF INHALED : Remove victim to fresh air.
 Get medical advice/attention.
 IF ON SKIN : Wash the affected area with soap and water.
 IF IN EYES : Flush eyes with plenty of water, and get medical advice
 /attention.
 IF SWALLOWED : Do not induce vomiting. Get medical advice/attention.
 If a mouth is polluted, wash it with plenty of water.
 MOST IMPORTANT SYMPTOM : No data available
 PROTECTION OF PERSON : No data available
 GIVE FIRST-AID : No data available
 SPECIAL NOTE TO DOCTOR : No data available

5. FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA : Use spray foam, foam, powder or CO₂ gas extinguishing media.

FIRST FIRE	: Use powder or CO ₂ gas extinguishing media.
LARGE-SCALE FIRE	: Use foam extinguishing media.
UNSUITABLE EXTINGUISHING MEDIA	: Prohibit rod-shaped water injection.
PECULIAR HAZARD STATEMENT	: May be harmful if inhaled vapor/mist produced at 260°C or more.
PECULIAR EXTINCTION METHOD	: Cut off combustion source of fire. : Sprinkle water to equipment to cool. : Prohibit to enter to the scene of a fire except staff.
PROTECTION OF THE PERSON	
EXTINGUISHES FIRE	: Extinguish fire on the windward side of the fire and not fail to wear protector.

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS	: Always wear protective equipment when working.
ENVIRONMENTAL PRECAUTIONS	: Take care not to be drained into river and drain. : If the medicine is used for the sea, it should be what suits the standard in the technology that provides by the transportation ministerial ordinance.
METHODS FOR CONTAINMENT AND CLEANING UP	
SMALL QUANTITY	: Remove source of a fire. : Remove with a spatula or shovel, or absorb with soil, sand or a cloth. Wipe off remainder with a cloth.
LARGE QUANTITY	: Prevent access by roping off the perimeter around the leak.
AT SEA	: Prevent dispersion by creating an oil fence. Scoop up or use adsorption mats to soak up. When chemicals are used, these must comply with technological standards as set down in ministry of transport ordinances.
PREVENTION MEASURE OF SECOND DISASTER	: Inform promptly a related organization to attempt prevention and the expansion prevention of the accident when leaking. : Remove source of a fire and prepare extinguishing media.

7. HANDLING AND STORAGE

HANDLING	
TECHNICAL MEASURES	: Avoid contact with flame, sparks and heated objects. Do not allow unnecessary dispersion of vapor. : Take steps to prevent static electricity, and use conductive work clothes and shoes. : Remove completely it in the safety area, if the mechanical equipment are repaired and are processed. : Wear protector, if there is possibility of skin contact or eye contact. : Avoid inhalation of vapor or mist. : Containers must be sealed.
NOTES	: The vapor from petroleum products builds up easily as it is heavier than air. It is therefore necessary to ensure adequate ventilation and take care with fire.
NOTES OF SAFE HANDLING	: Handling should be done at room temperature. Prevent contamination of water and impurities. : Avoid contact with halogens, strong acids, alkaline substances and oxidants.

STORAGE : Protect from sunlight. Store in a well-ventilated place.
 : Avoid heat, sparks, flames and any build-up of static electricity.
 : Avoid contact and storing with halogens, strong acids, alkaline substances and oxidants.
 : Do not apply pressure to empty containers.
 : Don't cut, weld, heat, or make the hole the container.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

EQUIPMENT MESURES : If the vapor arises, ventilation equipment or closing of vapor source is needed.
 : The equipment for washing and the body washing of eyes is set up near the handling area.

MANAGEMENT CONCENTRAITON : Not established
 ALLOWABLE CONCENTRATION : Not established
 : ACGIH Not established

PROTECTION

RESPIRATORY PROTECTION : If necessary, wear hazard mask.
 HAND PROTECTION : Wear the resistance to oil if coming in contact repeating for a long term.

EYE PROTECTION : Wear safety glasses with side shields.
 SKIN PROTECTION : When contacting for a long time or repeatedly, wear oil resistant ones.

APPROPRIATE SANITARY REQUIREMENT : Remove dirty clothes, wash completely and reuse.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE : Liquid
 COLOR : Milky white
 ODOR : Odorless
 p H : No data
 MELTING POINT/FREEZING POINT : No data
 INITIAL BOILING POINT AND BOILING : 80~90°C
 FLASH POINT : Not applicable
 Does not flash

UPPER/LOWER FLAMMABILITY OR EXPLOSIVE LIMITS : Not applicable
 VAPOR PRESSURE : No data
 VAPOR DENSITY : No data
 RELATIVE DENSITY (WATER=1) : Approx. 1.7
 SOLUBILITY : Water : Insoluble
 Other solvent : Insoluble

AUTO-IGNITION TEMPERATURE : No data
 DECOMPOSITION TEMPERATURE : No data
 VISCOSITY : No data

* These data except for appearance are about solvent.

10. STABILITY AND REACTIVITY

STABILITY	: Stability at room temperature
POSSIBILITY OF HAZARDOUS REACTIONS	: No reaction with water
CONDITIONS TO AVOID	: Heating, high temperature, and contact hazardous material
INCOMPATIBLE MATERIALS	: Avoid contact with halogens, strong acids, alkaline substances and oxidants.
HAZARDOUS DECOMPOSITION PRODUCTS	: Harmful thermal decomposition products may be produced such as gaseous hydrogen fluoride when heated at extremely high temperature.
OTHER	: No data available

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY	: Oral : rat : LD50 > 2,000 mg/kg Dermal : LD50 estimated to be > 5,000 mg/kg Inhalation(vapor) : rat : LC50 > 20.6 mg/l Inhalation(mist) : No data
SKIN CORROSION/IRRITATION	: Rabbit: No significant irritation
SERIOUS EYE DAMAGE/IRRITATION	: Rabbit: No significant irritation
RESPIRATORY OR SKIN SENSITIZATION	: No data
GERM CELL MUTAGENICITY	: Not mutagenic
CARCINOGENICITY	: No data available
REPRODUCTIVE TOXICITY	: No data available
STOT-single exposure	: No data available
STOT-repeated exposure	: No data available
ASPIRATION HAZARD	: No data available

12. ECOLOGICAL INFORMATION

ACUATIC TOXICITY	ACUTE : No data available
	CHARONIC : No data available
PERSISTENCE/DEGRADABILITY	: No data available
BIOACCUMULATIVE POTENTIAL	: No data available
MOBILITY IN SOIL	: No data available
OTHER ADVERSE EFFECTS	: No data available

13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD	: Consider disposal via licensed waste disposal company. Scrap may be incinerated under properly controlled condition. Follow all regulations in your country.
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14. TRANSPORT INFORMATION

Not classified as dangerous in all means of transport regulations, including air, sea and land.

INTERNATIANAL REGULATIONS

FOR TRANSPORT	: Not regulated (Not dangerous)
UN CLASS	: Not applicable
UN NUMBER	: Not applicable
PRODUCT NAME	: Not applicable
CONTAINER GRADE	: Not applicable
SEAWATER POLLUTION MATERIAL	: None

SPECIFIC SECURITY PRECAUTION
AND CONDITION OF TRANSPORTATION : The container is avoided direct sunlight, and it
loads so as not to be damaged, corroded and leak.
The collapse of cargo piles is prevented surely.
: Don' t pile the heavy load.

15. REGULATORY INFORMATION

EPCRA 311/312 Hazard Classifications : Physical Hazards : Not applicable
Health Hazards : Not applicable

16. OTHER INFORMATION

Please read the SDS well before use.

SAFETY DATA SHEETS ARE ISSUED BASED ON THE LATEST INFORMATION WE HAVE KNOWN.
HOWEVER, THESE ARE NOT THE ONE TO INSURE SAFETY.
THESE ARE PROVIDED TO COMPANIES HANDLING THE MATERIALS AS REFERENCE INFORMATION
REGARDING HAZARDOUS AND HARMFUL CHEMICALS TO ENSURE SAFE HANDLING.
WE ASK THAT THESE SHEETS BE USED BY COMPANIES AS REFERENCE AND WITH THE
UNDERSTANDING THAT IT IS NECESSARY FOR MEASURES APPROPRIATE TO THE SPECIFIC
CIRCUMSTANCES RELATED TO HANDLING THE MATERIALS TO BE TAKEN UNDER THEIR OWN
RESPONSIBILITY. ACCORDINGLY, THIS DATA SHEET IN NO WAY CONSTITUTES A GUARANTEE
OF SAFETY.