
SECTION 1 IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product Identifier:**Product Name:** DRY FILM LUBRICANT**Product Code:** HANARL UD-110CR**Relevant Identified Uses and Uses Advised Against :****Manufacturer:** KANTO KASEI LTD.**Address:** 1-8-1,Marunouchi,Chiyoda-ku,TOKYO 100-0005, JAPAN**Details of Supplier of Safety Data Sheet:****Supplier:** KANTO KASEI LTD.**Address:** 1-8-1,Marunouchi,Chiyoda-ku,TOKYO 100-0005, JAPAN**Telephone Number:** 03-3218-7111**E-mail Address:** 03-3218-7100**Emergency Telephone Number:**

SECTION 2 HAZARDS IDENTIFICATION

Emergency Overview: Appearance : Liquid , Milky white**US Regulatory Status:** Non hazardous under OSHA HCS.**US Label Elements:****Signal Word:** Not required.**Hazard Warning:** Not required.**Safety Advice:** Not required.**Hazardous Component:** Not required.**EU Classification:** Not classified as dangerous.**EU Label Elements:****Symbol & Indication:** Not required.**R-Phrase:** Not required.**S-Phrase:** Not required.**Dangerous Component:** Not required.**Applicable Label Elements in accordance with Annex V to 1999/45/EC:** Not required.**Authorisation# under (EC) No 1907/2006:** Not required.**Other Hazards:** No data available

SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

Substance or Mixture: Mixture

Ingredient(s):

Chemical Name/ Generic Name	CAS#	EC/ Registration#	Concentration/ Concentration Range (%)	EU Classification according to 67/548/EEC		EU Classification according to (EC) No 1272/2008	
				Symbol/ Indication of Danger	R-Phrase* ¹	Hazard Class/ Category Code	Hazard Statement* ¹
Fluorinated solvent	Confidential	Confidential	90~95	None	None	None	None
Fluoric oil, Solid lubricant and additive	Confidential	Confidential	5~10	None	None	None	None

*1 Full texts of R-phrase(s) and Hazard statement(s) are listed in SECTION 16

Carcinogen(s):

Chemical Name: _____ **CAS#:** _____ **Reference:** _____
 None

PBT Substance(s) and vPvB Substance(s):

Chemical Name: _____ **CAS#:** _____ **Category:** _____
 None

Substance(s) listed in Candidate List of SVHC:

Chemical Name: _____ **CAS#:** _____ **Category:** _____
 No component of this product is substance
 listed in Candidate List of SVHC.

SECTION 4 FIRST AID MEASURES

First Aid Measures:

Inhalation: Move to the fresh air.
Ingestion: Drink milk when quantity is small. Get medical attention when quantity is large.
Skin: Wipe off with paper or cloth, and wash the affected area with soap and water.
Eye: Flush eyes with plenty of water, and get medical advice/attention.

Most Important Symptoms and Effects, both Acute and Delayed:

Inhalation: No data available
Ingestion: No data available
Skin : No data available
Eye: No data available
Chronic Effects: No data available

Medical Conditions Generally known to be Aggravated by Exposure: No data available

Indication of Any Immediate Medical
Attention and Special Treatment Needed: No data available

SECTION 5 FIRE FIGHTING MEASURES

Extinguishing Media:

Suitable Extinguishing Media: Loaded stream in spray, foam, powder, or carbon dioxide gas extinguishing media

Unsuitable Extinguishing Media: Water is not recommended.

Special Hazards: May be harmful if inhaled vapor/mist produced at 260°C or more.

Hazardous Combustion Products: None

Advice for Fire-fighters: None

SECTION 6 ACCIDENTAL RELEASE MEASURES

**Personal Precautions, Protective
Equipment and Emergency
Procedures:**

Eliminate all ignition sources from surroundings.

Environmental Precautions:

Do not wash away into sewer. Should be prevented from entering sewage and drainage systems.

**Methods and Material for
Containment and Cleaning Up:**

Recovery : Take off with shovel or spatula. Cover with dry soil, sand or cloth, and absorb, to them, then take away.

Neutralization : Sweep remainder with cloth and wash off with soap and water.

Disposal : Place in a disposal container.

Reference to Other Sections:

None

SECTION 7 HANDLING AND STORAGE

Precautions for Safe Handling:

Handling must be at room temperature. Be careful not to be contaminated other grease oil and impurities.

**Conditions for Safe Storage,
Including Any Incompatibilities:**

Store closed, in well ventilate place at room temperature.

Specific End Uses:

Lubricant

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Control Parameters:

Product:	USA OSHA PEL	ACGIH TLV	EU OEL	DFG MAK
No data available				

Ingredient(s):	USA OSHA PEL	ACGIH TLV	EU OEL	DFG MAK
No data available				

Exposure Controls:

Engineering Controls: Ventilation is needed to keep air fresh.
 Washing facility for eyes and skin contact is necessary after work.

DNEL(s): _____

PNEC(s): _____

Individual Protection Measures:

Eye/Face Protection: Required Not Required _____
Skin Protection: Required Not Required Wear safety glasses depending on the necessity.
Respiratory Protection: Required Not Required Wear safety glasses depending on the necessity.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties:

Appearance: Liquid, Red purple
Odor: Slight odor.
pH: No data
Melting Point/Freezing Point (°C): No data
Initial Boiling Point and Boiling Range (°C): 75~80°C
Flash Point (°C): None
Evaporation Rate: No data
Flammability: No data
Upper/Lower Flammable or Explosive Limits: None
Vapor Pressure: Approx. 109 mmHg (25°C)
Vapor Density: Approx. 9.1 (0°C)

Relative Density:	Approx. 1.43 (25°C)
Water Solubility:	Insoluble
Fat Solubility:	No data
Partition Coefficient (n-Octanol/Water):	No data
Auto-ignition Temperature (°C):	Approx. 375°C
Decomposition Temperature (°C):	No data
Viscosity (mPa s):	No data
Explosive Properties:	None
Oxidizing Properties:	None
Other Information:	None

SECTION 10 STABILITY AND REACTIVITY

Reactivity: _____

Chemical Stability: Stable Unstable

Possibility of Hazardous Reactions: None

Conditions to Avoid: None

Incompatible Materials: None

Hazardous Decomposition Products: None

SECTION 11 TOXICOLOGICAL INFORMATION

Information on Toxicological Effects:**Acute Toxicity:**

Inhalation: No data

Ingestion: No data

Corrosivity/Irritation:

Skin: No data available

Eye: No data available

Sensitization:

Skin: No data available

Repeated Dose Toxicity: No data available

Carcinogenicity: No human carcinogen or potential carcinogen according to US. OSHA Regulation.

Mutagenicity: No data available

Toxicity for Reproduction: No data available

Other Information: None

Toxicokinetics, Metabolism and Distribution: No data available

SECTION 12 ECOLOGICAL INFORMATION

Toxicity: No data available

Persistence and Degradability: No data available

Bioaccumulative Potential: No data available

Mobility in Soil: No data available

Results of PBT and vPvB Assessment: No data available

Other Adverse Effects: None

SECTION 13 DISPOSAL CONSIDERATIONS

Waste Treatment Methods: The users can dispose industrial waste by themselves, or else, contract with the industrial waste disposing firm authorized by the administrative authorities to treat waste.

SECTION 14 TRANSPORT INFORMATION

UN Number: None

UN Proper Shipping Name: None

Transport Hazard Class: None

Packing Group: None

Environmental Hazards: None

Special Precautions for User: None

Transport in Bulk according to Annex II of MARPOL 73/78 and IBC Code: None

SECTION 15 REGULATORY INFORMATION

US Information:

SARA Title III, 313:

Chemical Name: _____

Wt%: _____

None

California Proposition 65:

Chemical Name: _____

Wt%: _____

None

EU Information:

Safety, Health and Environmental Regulations/Legislation:

(EC) No 1907/2006:

Authorisation:

Not regulated

Restriction:

Not regulated

(EC) No 1005/2009:

Not regulated

(EC) No 850/2004:

Not regulated

(EC) No 689/2008:

Not regulated

Others:

Not regulated

Chemical Safety Assessment under (EC) No 1907/2006:

Not regulated

SECTION 16 OTHER INFORMATION

Other Information: None

Annex: None

Date of Issue: May 20, 2013

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Literature Reference:

Above Descriptions are in accordance with our MSDS (OUR REF No. III-352)

Abbreviations:

EU: European Union

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

SVHC: Substances of Very High Concern

OSHA PEL: PEL (Permissible Exposure Limit) under Occupational Safety and Health Administration

ACGIH TLV: TLV (Threshold Limit Value) under American Conference of Governmental Industrial Hygienists

EU OEL: Occupational exposure limits at Community level under Directive 2004/37/EC Annex, 98/24/EC Annex, 91/322/EEC Annex, 2000/39/EC Annex, 2006/15/EC Annex and 2009/161/EU

DFG MAK: MAK (Maximale Arbeitsplatz-Konzentration) under Deutsche Forschungsgemeinschaft

DNEL: Derived No-Effect Level

PNEC: Predicted No-Effect Concentration