

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

Product Name: LOGENEST LAMBDA RAN-12

Product Code: None

Company Name: NIPPON KOYU LTD.

Address: No.385-14 SHIINOMORI SODEGAURA CHIBA 299-0247 JAPAN

Telephone Number: +81-438-60-2180

Use of the product: Lubricating grease

SECTION 2 HAZARDS IDENTIFICATION

EU Classification: Not classified as dangerous.

Emergency Overview: Smooth, white, semi-solid, odorless

Potential Health Effects and Symptoms:

Inhalation: Not identified

Ingestion: Accidental ingestion of the material may be damaging to the health of the individual.
Emesis (Vomit), or diarrhea.

Eye: Not identified

Skin: The material may cause mild inflammation of the skin either following direct contact or after a delay of some time.

Chronic Effects: Not known

Medical Conditions Generally known to be Aggravated by Exposure: Oil mist or vapors from material at high temperatures may irritate respiratory passages. Inhalation of decomposition products of PTFE(above 260°C) may cause polymer fume fever, a temporary flu-like illness accompanied by fever, chills, and sometimes cough of approximately 24 hours duration.

SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient(s): Chemical Name /Generic Name	CAS#	EC#	Wt%	EU symbol	EU R-Phrase	USA OSHA PEL	ACGIH TLV	EU ILV	DFG MAK
Perfluorinated polyethers base oil	Confidential	Confidential	65-75	None	None	Not established	Not established	Not established	Not established
Poly tetra fluoro ethylene thickener	Confidential	Confidential	25-35	None	None	Not established	Not established	Not established	Not established
Additive	Confidential	Confidential	<5	None	None	Not established	Not established	Not established	Not established

Specific Lubricating grease

Uses: _____

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines: None

Engineering Controls: Not required

Personal Protection Equipment(s):

Respiratory Protection: Required Not Required

Eye/Face Protection: Required Not Required Wear safety glasses.

Skin Protection: Required Not Required To prevent any contact, wear impervious clothing such as gloves, apron.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Smooth, white, semi-solid

Odor: Odorless

pH: Not applicable

Boiling Point/Range(°C): No data available

Melting Point/Range(°C): No data available

Decomposition Temperature(°C): No data available

Flash Point(°C): Not applicable

Flammable (Explosive) Limits: No data available

Auto ignition Temperature(°C): Not applicable

Flammability: Not applicable

Explosive Properties: Not applicable

Oxidizing Properties: Not applicable

Vapor Pressure: No data available

Vapor Density: No data available

Density/Specific Gravity: Ca. 1.9 (25°C)

Water Solubility: Negligible

Fat Solubility: No data available

Partition Coefficient (n-Octanol/Water): No data available

Percent Volatile(%): Not applicable

Evaporation Rate: Not applicable

Viscosity(m Pa s): Not applicable

SECTION 10 STABILITY AND REACTIVITY

Stability: Stable Unstable

Conditions to Avoid: Avoid heating the product above 260°C. Avoid contact with flames.

Materials to Avoid: Acids. Strong alkaline non aqueous compounds. Oxidizing agents such as H₂O₂, permanganates and perchlorates. Halogens and halogenated compounds.

Hazardous Decomposition CO,CO₂,HF,COF₂

Products:

Hazardous Polymerization: May Occur Will Not Occur

Conditions to Avoid: None

SECTION 11 TOXICOLOGICAL INFORMATION

Acute Toxicity:

Inhalation: Inhalation LD50 (vapor): No data available

Inhalation LD50 (mist): No data available

Ingestion: Oral LD50: >2000mg/kg (rats)

Accidental ingestion of the material may be damaging to the health of the individual.

Eye: No data available

Skin: Dermal LD50: >2000mg/kg (rats).

The material may cause mild inflammation of the skin.

Sensitization: No data available

Mutagenicity: No data available

Reproductive Toxicity: No data available

Carcinogenicity: No data available

Others: None

SECTION 12 ECOLOGICAL INFORMATION

Mobility: No data available

Persistence/Degradability: No data available

Bioaccumulation: No data available

Ecotoxicity: No data available

Other Adverse Effects: No data available

SECTION 13 DISPOSAL CONSIDERATION

Method of Disposal: Place contaminated materials in disposable containers and dispose of in a manner consistent with applicable regulations. Contact local environmental or health authorities for approved disposal of this material.

Date of Issue: June 14, 2010 **Revised Date:** Not applicable

SECTION 16 OTHER INFORMATION

Other Information: None

Date of Issue: June 14, 2010

Revised Date: Not applicable

Literature Reference:

- U.S. Department of Labor, 29CFR Part 1910
 - U.S. Environmental Protection Agency, 40CFR Part 372
 - U.S. Consumer Product Safety Commission, 16CFR Part 1500
 - Safe Drinking Water and Toxic Enforcement Act of 1986
 - Title III of the Superfund Amendments and Reauthorization Act of 1986
 - ACGIH, Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices
 - U.S. Department of Health and Human Services National Toxicology Program, Annual Report on Carcinogens
 - World Health Organization International Agency for Research on Cancer, IARC Monographs on the Evaluation on the Carcinogenic Risk of Chemicals to Humans
 - DFG, List of MAK and BAT Values
 - EU Directive 76/769/EEC, 67/548/EEC, 88/379/EEC, 1999/45/EC and their amendments.
 - EU Regulation (EC)3093/94, (EEC)2455/92 and their amendments.
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Abbreviations:

EU: European Union

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 ILV: Indicative Limit Values for Occupational Exposure under EU Directive 91/322/EEC, 2000/39/EC and 2006/15/EC

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

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

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