SECTION 1 IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING					
Product Name:	PERMALUB EGN-1				
Use of the product:	Lubricating grease.				
Product Code:	None.				
Company Name:	NIPPECO LTD.				
Address:	No385-14 SHIINOMORI SODEGAURA CHIBA 2	299-0247 JAPAN			
Telephone Number:	+81-438-60-2180				
SECTION2 HAZARDS	DENTIFICATION				
EU Information:					
Classification(67/548/EEC	Not classified.				
or 1999/45EC):					
Classification(EC1272/2008	<i>i</i>):				
Physical Hazards:	Flammable solids:	Not classified.			
	Pyrophoric solid:	Not classified.			
	Self-heating substances and mixtures:	Not classified.			
	Corrosive to metals:	Not classified.			
Health Hazards:	Acute toxicity(oral):	Not classified.			
	Acute toxicity(dermal):	Classification not possible.			
	Acute toxicity(inhalation: mist):	Classification not possible.			
	Skin corrosion/irritation:	Classification not possible.			
	Serious eye damage/eye irritation:	Classification not possible.			
	Sensitization-respiratory:	Classification not possible.			
	Sensitization-skin:	Classification not possible.			
	Germ cell mutagenicity:	Classification not possible.			
	Carcinogenicity:	Classification not possible.			
	Toxic to reproduction:	Classification not possible.			
	Specific target organ systemic toxicity following single exposure:	Classification not possible.			
	Specific target organ systemic toxicity following repeated exposure:	Classification not possible.			
	Aspiration toxicity:	Classification not possible.			
Environmental Hazards:	Hazardous to the aquatic environment-Acute hazard:	Classification not possible.			
	Hazardous to the aquatic environment-Chronic hazard:	Classification not possible.			
	The hazards without the above mention are "Not applicable" or "Classification not possible".				
Hazard Pictogram(s):	No pictogram.				
Signal Word(s):	No signal word.				
Hazard Statement(s):	No hazard statement.				
Precautionary Statement(s)	:				

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Prevention: Not required.

Response: Not required.

Storage: Not required.

Disposal: Not required.

Other Hazards: Combustibility. Keep away from ignition sources such as heat/sparks/open flames.

Vapors from this product at high temperatures (above 150°C) may irritate respiratory passages.

SECTION3 COMPOSITION/INFORMATION ON INGREDIENTS

Ingred	lient	(\mathbf{S})):

Chemical Name	CAS#	EC#	Wt%	EU	EU	USA	ACGIH	EU	DFG
/ Generic Name				Classification	Labelling	OSHA PEL	TLV	ILV	MAK
Synthetic silicone	Confidential	Confidential	75-85	None	None	Not	Not	Not	Not
base oil						established	established	established	established
Lithium soap	Confidential	Confidential	10-20	None	None	Not	Not	Not	Not
thickener						established	established	established	established
Additives	Confidential	Confidential	1-5	None	None	Not established (Except the	Not established (Except the	Not established	Not established
(Silicon dioxide)	7631-86-9	231-545-4	(1-5)	None	None	below) 20mppcf,80(mg/m³)/ %Si O ₂	below) Not established	Not established	4 mg/m ³ (Inhalable fraction), 0.3mg/m ³ (Respirable fraction)

Carcinogen:

Chemical Name: None. CAS#: Reference:

No component of this product is listed as a human carcinogen or a potential carcinogen in IARC Monographs, U.S. NTP, OSHA regulation, and Annex VI of Regulation (EC) 1272/2008.

PBT substance and vPvB substance:

Chemical Name: None. CAS#: Category:

No component of this product is a PBT or vPvB substance under Regulation (EC)1907/2006.

SECTION 4 FIRST AID MEASURES

First Aid Measures:

Inhalation: Remove exposed person to fresh air if adverse effects are observed.

Ingestion: Do not make person vomit unless directed to do so by medical personnel.

Eye: Flush immediately with water for at least 15 minutes. Get immediate medical attention.

Skin: Wash with soap and water. Get medical attention if irritation develops.

Note to Physicians: Treat symptomatically.

SECTION 5 FIRE FIGHTING MEASURES

Extinguishing Media:

Extinguishing Media: Use water fog, foam, dry chemical or carbon dioxide to extinguish flames.

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Unsuitable	DO NOT use forcible water.
Extinguishing Media:	
Special Fire	Wear self-contained breathing apparatus and protective clothing if involved in a fire of other
Fighting Procedures:	materials.
Unusual Fire and	Not known.
Explosion Hazards:	
Special Hazards Arising from the	Substance or Mixture:
Hazardous Combustion	CO, CO ₂ ,SiO ₂
Products:	
Other Properties:	None.
Advice for firefighters:	None.
SECTION 6 ACCIDENTAL F	ELEASE MEASURES
Personal precautions, protective	Eliminate all ignition sources. Evacuate surrounding areas.
equipment and emergency	
procedures:	
Environmental Precautions:	Should be prevented from contaminating soil or from entering sewage and drainage systems and
	bodies of water.
Methods and Material for	Sweep material and place in a disposal container. Dispose of via a licensed waste disposal
Containment and Cleaning up:	contractor.
Reference to Other Sections:	None.
SECTION 7 HANDLING AND	DSTORAGE
Precautions for Safe Handling:	Put on appropriate personal protective equipment (see SECTION8). Workers should wash
	hands and face before eating, drinking and smoking. Avoid contact with eyes, skin and
	clothing. Avoid breathing vapor or mist. Keep in the original container or an approved alternative
	made from a compatible material, kept tightly closed when not in use. Empty containers retain
	product residue and can be hazardous. Do not reuse container.
Conditions for Safe Storage,	Store in a cool, dry place with adequate ventilation. Keep away from open flames and high
Including Any	temperatures.
Incompatibilities:	
Specific End Uses:	Lubricating grease.
CECUTION O EXPOCUTE CON	NEDOLC / DEDCONAL DOODECTION
SECTION 8 EXPOSURE CON	NTROLS / PERSONAL PROTECTION
Control Parameters:	None.
	INOTIC.
Exposure Controls:	

MATERIAL SAFETY DATA SHEET No.M-8294 Page 4 of 7 **Engineering Controls:** When mist is generated, the limited part should be ventilated. **Personal Protection Equipment(s):** Required Mot Required **Respiratory Protection:** Not ordinarily required. \checkmark Required ☐ Not Required Wear safety glasses. **Eye/Face Protection: Skin Protection:** Required Not Required To prevent contact, wear impervious clothing such as gloves, apron. SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES Information on Basic Physical and Chemical Properties: Appearance: Smooth, gray, semi-solid. Odor: Odorless. No data available. pH: **Boiling Point/Range(°C):** Not applicable. **Melting Point/Range(°C):** Not applicable. **Decomposition** Not applicable. Temperature(°C): Flash Point(°C): >200 (SETA) Flammable (Explosive) Limits: No data available. No data available. **Autoignition Temperature(°C):** Flammability: No data available. **Explosive Properties:** Not applicable. **Oxidizing Properties:** Not applicable. Vapor Pressure: No data available. Vapor Density: No data available. Ca. 1.0 (25°C) Density/Specific Gravity: Water Solubility: Negligible. **Fat Solubility:** No data available. **Partition Coefficient** No data available. (n-Octanol/Water): No data available. Percent Volatile(%): **Evaporation Rate:** Not applicable. Viscosity(m Pa s): Not applicable. Other Information: None. SECTION 10 STABILITY AND REACTIVITY Reactivity: Not known. ☑ Stable ☐ Unstable **Chemical Stability:** ☐ May Occur ☐ Will Not Occur Possibility of Hazardous Reactions:

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Conditions to Avoid: Heat, sparks, flames, and other ignition sources.

Incompatible Materials: Acids. Oxidizing agents such as H₂O₂, permanganates and perchlorates.

Halogens and halogenated compounds.

Hazardous Decomposition

Products: CO, CO₂, SiO₂

SECTION 11 TOXICOLOGICAL INFORMATION

Acute Toxicity: Oral rats LD50: > 5000 mg/kg, Not classified.

Dermal: No data available.

Inhalation (vapor): No data available. Inhalation (mist): No data available.

Skin corrosion/irritation: Serious eve damage/eve

irritation:

No data available.

No data available.

Sensitization-respiratory: No data available.

Sensitization-skin: No data available.

Germ cell mutagenicity: No data available.

Carcinogenicity: Base oil, Thickener, Additives: Not listed by IARC, OSHA, NTP, EU and ACGIH.

Toxic to Reproduction: Specific target organ systemic

toxicity following single

exposure:

Specific target organ systemic toxicity following repeated

exposure:

No data available.

No data available.

No data available.

Aspiration Toxicity:

No data available.

Vapors(formaldehyde may release) from this product at high temperatures (above 150°C) may Others:

irritate respiratory passages. So, use adequate ventilation when this product is heated at

approximately 150°C and above in the presence of air.

SECTION 12 ECOLOGICAL INFORMATION

Ecotoxicity:

Aquatic: No data available.

Terrestrial: No data available.

Persistence/Degradability: No data available.

Bioaccumulative potential: No data available.

Mobility in soil: No data available.

Results of PBT and vPvB

assessment:

Other Adverse Effects:

None.

None.

SECTION 13 DISPOSAL CONSIDERATIONS

Waste Treatment Methods:	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.	
SECTION 14 TRANSPORT II	NFORMATION	
UN#:	None.	
UN Proper Shipping Name:	None.	
Transport Hazard Class(es):	None.	
Packing Group:	None.	
Environmental Hazards:		
Marine Pollutant:	☐ Yes Chemical name (wt%)	
	☑ No	
Special Precautions for User:	None.	
Transport in bulk according to	None.	
Annex II of MARPOL 73/78		
and the IBC Code:		
SECTION 15 REGULATORY	INFORMATION	
EU Information:		
Classification(EC1272/2008):	See SECTION 2.	
Hazardous Component(s):	None.	
Classification(67/548/EEC		
or 1999/45EC):		
Symbol & Indication:	Not required.	
R-Phrase:	Not required.	
S-Phrase:	Not required.	
Dangerous Component(s):	None.	
Special Precautions under		
67/548/EEC Article 8 and 13		
or 1999/45/EC Annex V:	Not required.	
Specific Provisions in Relation to	Protection of Man or the Environment:	
76/769/EEC:	Not regulated.	
(EC)2037/2000:	Not regulated.	
(EC)304/2003: (EC)1907/2006	Not regulated.	
Title VII:	Not regulated.	
(EC)1907/2006 Title VII:	Not morphised	
TIUC YM.	Not regulated.	

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Others: None.

USA Information:

Information on the Label under OSHA HCS:

Signal Word(s): Not required.

Hazard Warning: Not required.

Safety Advice: Not required.

Hazardous Component(s): Not required.

SARA Title III, 313:

Chemical Name: None. Wt%:

California Proposition 65:

Chemical Name: None. Wt%:

SECTION 16 OTHER INFORMATION

Other Information: None.

Date of Issue: June 14, 2011

Revised Date: December 16, 2013

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,(EC)1907/2006,(EC)1272/2008 and their amendments.

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.