

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

1.1 Product identifier

Product name: PERMALUB NE BIN-6

Product code: None.

SDS No. M-3146

1.2 Relevant identified uses of the substance or mixture and uses advised against

Use of the Grease for industrial applications.

substance/mixture: No further relevant information available.

Recommend Not applicable.

use/restrictions on use:

1.3 Details of the supplier of the safety data sheet

Company name: NIPPECO LTD.

Address: No385-14 SHIINOMORI SODEGAURA CHIBA 299-0247 JAPAN

Telephone number: +81-438-60-2180

1.4 Emergency telephone number

+81-438-60-2180

SECTION 2 HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification(EC1272/2008): The product is not classified as hazardous according to the CLP regulation.

Physical hazards: Flammable solids: Not classified.

Pyrophoric solids: Not classified.

Self-heating substances and mixtures: Not classified.

Corrosive to metals: Not classified.

Health hazards: Acute toxicity-Oral: Classification not possible.

Acute toxicity-Dermal: Classification not possible.

Acute toxicity-Inhalation: mist: Classification not possible.

Skin corrosion/irritation: Classification not possible.

Eye damage/ irritation: Classification not possible.

Sensitization-Respiratory: Classification not possible.

Sensitization-Skin: Classification not possible.

Germ cell mutagenicity: Classification not possible.

Carcinogenicity: Classification not possible.

Reproductive toxicity: Classification not possible.

Specific target organ toxicity
Single everyory
Classification not possible.

-Single exposure:

Specific target organ toxicity
-Repeated exposure:

Classification not possible.

Aspiration hazard: Classification not possible.

Environmental hazards:

Hazardous to the aquatic environment
-Acute (short-term) aquatic toxicity:

Classification not possible.

Date of issue: August 23,2016 **Revised date:** Not applicable. Page 1/9



Hazardous to the aquatic environment

-Chronic (long term) aquatic toxicity:

Classification not possible.

The hazards without the above mention are "Not applicable" or "Classification not possible".

Classification(OSHA HCS 29 CFR 1910.1200):

The product is not classified as hazardous according to OSHA GHS regulations within the

United States.

2.2 Label elements

Hazard pictogram(s): No pictogram.

Signal word: No signal word.

Hazard statement(s): No hazard statement.

Precautionary statement(s):

Prevention: Not required.

Response: Not required.

Storage: Not required.

Disposal: Not required.

2.3 Other hazards

Other hazards which do Combustibility. Keep away from ignition sources such as heat/sparks/open flames.

not result in classification: Decomposition at flame temperatures may form toxic fluorine compounds. Avoid breathing

decomposition products.

SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

Substance/mixture Mixture

Ingredient(s):

Chemical name	CAS#	EC#	Wt%	EU	EU	USA	ACGIH	EU
/ generic name				Hazard class	Category code	OSHA PEL	TLV	ILV
Synthetic	Confidential	Confidential	70-80	None	None	Not established	Not established	Not
hydrocarbon base oil								established
Lithium soap	Confidential	Confidential	5-15	None	None	Not established	Not established	Not
thickener							(Except the below)	established
Lithium soap	4485-12-5	224-772-5	(0.5-	None	None	Not established	10mg/m ³	Not
thickener (Lithium			1.5)				(TWA :as	established
stearate)							stearates)	
Additives(Poly tetra	Confidential	Confidential	10-20	None	None	Not established	Not established	Not
fluoro ethylene, etc.)						(Except the below)	(Except the below)	established
(Organic	68412-26-0	270-180-5	(1-5)	None	None	15 mg/m ³	10 mg/m ³	Not
molybdenum.)						TWA: Total	TWA:	established
						dust as Mo	Insoluble	
							compounds, as	
							Мо	
(Refined mineral base	Confidential	Confidential	(0.1-	None	None	5mg/m ³	5mg/m ³	Not
oil)			0.5)			(TWA: as oil mist)	(TWA: as oil mist)	established

Carcinogen:

Chemical name: None. CAS#: Reference:

Date of issue: August 23,2016 **Revised date:** Not applicable. Page 2/9

SAFETY DATA SHEET



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.

Refined mineral base oil, by definition, is considered hazardous according to OSHA. Because it carries Threshold limit value (TLV) for mineral oil mist. Refined mineral base oil contain <3.0% DMSO extractable material.

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.

A statement that the specific chemical identity(ies) and/or exact percentage(s) of composition has been withheld as a trade secret.

SECTION 4 FIRST AID MEASURES

4.1 Description of first aid measures

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

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

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

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

Protection of first-aiders: No action shall be taken involving any personal risk or without suitable training.

4.2 Most important symptoms and effects, both acute and delayed

See SECTION 11 for more detailed information on health effects and symptoms.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician: Treatment should in general be symptomatic and directed to relieving any effects.

SECTION 5 FIRE FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media: Use water fog, foam, dry chemical or carbon dioxide to extinguish flames.

Unsuitable extinguishing DO NOT use forcible water. See Section 11 for more detailed information on health effects and

media: symptoms.

5.2 Special hazards arising from the substance or mixture

Hazards from the substance In a fire or if heated, a pressure increase will occur and the container may burst.

or mixture: Formation of toxic gases is possible during heating or in case of fire.

Hazardous combustion Combustion products may include the following:

products: Carbon oxides (CO, CO₂), HF, COF₂.

Decomposition at flame temperatures may form toxic fluorine compounds. Avoid breathing

decomposition products.

5.3 Advice for firefighters

Special precautions for Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a

fire-fighters: fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment Fire-fighters should wear appropriate protective equipment and self-contained breathing

for fire-fighters: apparatus with a full face-piece operated in positive pressure mode.

Date of issue: August 23,2016 **Revised date:** Not applicable. Page 3/9



SECTION 6 ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency Eliminate all ignition sources. Evacuate surrounding areas.

personnel:

For emergency responders: Particular danger of slipping on leaked/spilled product.

6.2 Environmental precautions

Should be prevented from contaminating soil or from entering sewage and drainage systems

and bodies of water.

6.3 Methods and material for containment and cleaning up

Small spill: Move containers from spill area. Absorb with an inert material and place in an appropriate

waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill: Move containers from spill area. Prevent entry into sewers, water courses, basements or

confined areas. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Suction or scoop the spill into appropriate disposal or recycling vessels, then cover

spill area with oil absorbent. Dispose of via a licensed waste disposal contractor.

6.4 Reference to other sections

See SECTION 7 for information on safe handling.

See SECTION 8 for information on personal protection equipment.

See SECTION 13 for disposal information.

SECTION 7 HANDLING AND STORAGE

7.1 Precautions for safe handling

Protective measures: Put on appropriate personal protective equipment (see SECTION8).

Advice on general Workers should wash hands and face before eating, drinking and smoking. Avoid contact

occupational hygiene: 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.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in a dry, cool and well-ventilated area, away from incompatible materials (see SECTION 10). Keep away from heat and direct sunlight.

Keep container tightly closed and sealed until ready for use. Containers that have been opened

must be carefully resealed and kept upright to prevent leakage. Store and use only in

equipment/ containers designed for use with this product. Do not store in unlabeled containers.

Not suitable: 7.3 Specific end use(s)

No further relevant information available.

Prolonged exposure to elevated temperature.

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Date of issue: August 23,2016 **Revised date:** Not applicable. Page 4/9



Page 5/9

		No exposure limit value known on the product itself.						
	OHSA PEL: TWA: 5 mg/m ³ 8 hours. (as oil mist, mineral)							
	ACGIH TLV: TWA: 5 mg/m ³ 8 hours. (as oil mist, mineral)							
	NIOSH REL: TWA: 5 mg/m³ 10 hours. (as oil mist, mineral) EU ILV: Not established							
	EU	ILV: Not est	abiisned					
8.2 Exposure controls	***	. , .	. 1 4 12 5 1					
Appropriate engineering	When mist is generated, the limited part should be ventilated. A washing facility/water for eye and skin cleaning purposes should be present.							
controls:	A washing facility/water for eye and skin cleaning purposes should be present.							
Individual protection measures	, such	n as persona	l protective equipment					
Eye/face protection:		Required	☐ Not required	Wear safety glasses with side shields.				
Skin(hand/other) protection:	$\overline{\mathbf{A}}$	Required	☐ Not required	To prevent contact, wear impervious clothing				
				such as gloves, apron.				
Respiratory protection:	Ш	Required	✓ Not required	No special respiratory protection equipment is				
				required under normal conditions of use with				
				adequate ventilation. In case of insufficient ventilation, wear suitable				
				respiratory equipment.				
Thermal hazards:		Required	☑ Not required	Not normally required.				
	Ave		the environment.					
Environmental exposure	711	ла тексияс ко	die chvironnent.					
controls:								
SECTION 9 PHYSICAL AND 0	CHE	MICAL PR	OPERTIES					
SECTION 9 PHYSICAL AND 0								
	nd ch	nemical prop						
9.1 Information on basic physical a	nd ch	nemical prop	perties					
9.1 Information on basic physical a Appearance:	nd ch Smo	nemical propooth, light ye	perties					
9.1 Information on basic physical a Appearance: Odor:	Smo Blan	nemical propooth, light ye	perties llow, semi-solid.					
9.1 Information on basic physical a Appearance: Odor: Odor threshold:	Smo Blan Not Not	nemical propooth, light yend odor.	perties llow, semi-solid.					
9.1 Information on basic physical a Appearance: Odor: Odor threshold: pH:	Smo Blan Not Not	nemical propooth, light yend odor. determined.	perties llow, semi-solid.					
9.1 Information on basic physical a Appearance: Odor: Odor threshold: pH: Melting point/ freezing	Smo Blan Not Not	nemical propooth, light yend odor. determined.	perties llow, semi-solid.					
9.1 Information on basic physical a Appearance: Odor: Odor threshold: pH: Melting point/freezing point(°C):	Smo Blan Not Not	nemical proports, light yeard odor. determined. determined. determined.	perties llow, semi-solid.					
9.1 Information on basic physical a Appearance: Odor: Odor threshold: pH: Melting point/ freezing point(°C): Initial boiling point and	Not Not Unc	nemical proports, light yeard odor. determined. determined. determined.	perties Illow, semi-solid.					
9.1 Information on basic physical a Appearance: Odor: Odor threshold: pH: Melting point/freezing point(°C): Initial boiling point and boiling range (°C):	Not Not Unc	nemical propooth, light yend odor. determined. determined. determined.	perties Illow, semi-solid.					
9.1 Information on basic physical a Appearance: Odor: Odor threshold: pH: Melting point/freezing point(°C): Initial boiling point and boiling range (°C): Flash point(°C):	Not Not Vince Not Not Not Not Not Not	nemical propooth, light yend odor. determined. determined. determined. determined.	perties Illow, semi-solid.					
9.1 Information on basic physical a Appearance: Odor: Odor threshold: pH: Melting point/freezing point(°C): Initial boiling point and boiling range (°C): Flash point(°C): Evaporation rate:	Not Not Vince Not Not Not Not Not Not	nemical propooth, light yeard odor. determined. determined. determined. determined. determined.	perties Illow, semi-solid.					
9.1 Information on basic physical a Appearance: Odor: Odor threshold: pH: Melting point/freezing point(°C): Initial boiling point and boiling range (°C): Flash point(°C): Evaporation rate: Upper/lower flammability or	Not Not Not Not Not Not Not Not	nemical propooth, light yeard odor. determined. determined. determined. determined. determined.	perties llow, semi-solid.					
9.1 Information on basic physical a Appearance: Odor: Odor threshold: pH: Melting point/freezing point(°C): Initial boiling point and boiling range (°C): Flash point(°C): Evaporation rate: Upper/lower flammability or explosive limits:	Not Not Not Not Not Not Not Not Not	nemical propooth, light yend odor. determined. determined. determined. determined. determined. determined.	perties Illow, semi-solid.					
9.1 Information on basic physical a Appearance: Odor: Odor threshold: pH: Melting point/freezing point(°C): Initial boiling point and boiling range (°C): Flash point(°C): Evaporation rate: Upper/lower flammability or explosive limits: Vapor pressure:	Not	nemical propooth, light yend odor. determined. determined. determined. determined. determined. determined. determined.	perties Illow, semi-solid.					

Date of issue: August 23,2016 **Revised date:** Not applicable.

SAFETY DATA SHEET



Partition coefficient: n-	Not determined.				
octanol/water:					
Auto-ignition	Not determined.				
temperature(°C):					
Decomposition	Not determined.				
temperature($^{\circ}$ C):					
Viscosity(m Pa s):	Not determined.				
Explosive properties:	Not determined.				
Oxidizing properties:	Not determined.				
9.2 Other information					
	No further relevant information available.				
SECTION 10 STABILITY AND	PREACTIVITY				
10.1 Reactivity	No specific test data available for this product.				
10.2 Chemical stability	☑ Stable □ Unstable				
10.3 Possibility of hazardous reaction	ons				
	☐ May Occur ☑ Will not occur				
10.4 Conditions to avoid	Heat, sparks, flames, and other ignition sources.				
10.5 Incompatible materials	Acids. Oxidizing agents such as H ₂ O ₂ , permanganates and perchlorates.				
	Halogens and halogenated compounds.				
10.6 Hazardous decomposition pro	ducts				
	Carbon oxides (CO, CO ₂), HF,COF ₂				
	Decomposition at flame temperatures may form toxic fluorine compounds.				
SECTION 11 TOXICOLOGIC	AL INFORMATION				
11.1 Information on toxicological e	ffects				
Likely routes of exposure:	Eye contact, skin, ingestion.				
Symptoms related to the physic	al, chemical, and toxicological characteristics:				
	See SECTION 4 for skin contact, eye contact, and ingestion.				
Delayed and immediate effects	and also chronic effects from short and long term exposure:				
	Not applicable.				
Numerous measures of toxicity	:				
	Not applicable.				
Acute toxicity:	Oral rats LD50: > 5000 mg/kg, (Base oil).				
	Dermal : No data available				
	Inhalation (vapor): No data available.				
	Inhalation (mist): No data available.				
Skin corrosion/irritation:	No known significant effects or critical hazards.				
Serious eye damage/irritation:	No known significant effects or critical hazards.				

Date of issue: August 23,2016 **Revised date:** Not applicable. Page 6/9

SAFETY DATA SHEET



Sensitization-Respiratory:	No known significant effects or critical hazards.			
Sensitization-Skin:	No known significant effects or critical hazards.			
Germ cell mutagenicity:	No known significant effects or critical hazards.			
Carcinogenicity:	Base oil, Thickener, Additives: Not listed by IARC, OSHA, NTP, EU and ACGIH.			
Toxic to reproduction:	No known significant effects or critical hazards.			
Specific target organ systemic toxicity following single exposure:	No known significant effects or critical hazards.			
Specific target organ systemic toxicity following repeated exposure:	No known significant effects or critical hazards.			
Aspiration hazard:	No known significant effects or critical hazards.			
Other information:	No further relevant information available.			
SECTION 12 ECOLOGICAL I	NFORMATION			
12.1 Toxicity				
Aquatic:	No further relevant information available.			
Terrestrial:	No further relevant information available.			
12.2 Persistence and degradability				
	No specific test data available for this product.			
12.3 Bioaccumulative potential	No further relevant information available.			
12.4 Mobility in soil	No further relevant information available.			
12.5 Results of PBT and vPvB asse	ssment			
	Not applicable.			
12.6 Other adverse effects	No additional information available.			
SECTION 13 DISPOSAL CON	SIDERATIONS			
13.1 Waste treatment methods				
Product and packaging:	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 IN	FORMATION			
14.1 UN number	Not regulated.			
14.2 UN proper shipping name	Not regulated.			
14.3 Transport hazard class(es)	Not regulated.			
14.4 Packing group	Not regulated.			
14.5 Environmental hazards				
Marine pollutant:	☐ Yes Chemical name (wt%)			
	☑ No			
14.6 Special precautions for user	Not applicable.			

Date of issue: August 23,2016 **Revised date:** Not applicable. Page 7/9

SAFETY DATA SHEET



14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable.

SECTION 15 REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

EU information

(EC)1907/2006

Title VII: Not regulated.

(EC)1907/2006

Title VII: Not regulated.

(EC)1005/2009: Not regulated.

(EC)805/2004: Not regulated.

(EU)649/2012: Not regulated.

Others: No further relevant information available.

USA information

TSCA (Toxic substances control act)

Not regulated. All ingredients are listed.

Information on the label under OSHA HCS

Signal word: Not required.

Hazard statement(s): Not required.

Pictogram(s): Not required.

Precautionary statement(s): Not required.

Unclassified hazards Not applicable.

(HNOC):

Percentage of ingredient(s) Not applicable.

with unknown toxicity:

SARA Title III § 313

Chemical name: Zinc compounds. Wt%: $1\sim5$

California proposition 65

Chemical name: None. Wt%:

Others No further relevant information available.

15.2 Chemical safety assessment

This product contains substances for which Chemical Safety Assessments are still required.

SECTION 16 OTHER INFORMATION

Other Information

No additional information available.

Date of Issue: August 23, 2016

The date of preparation of the Not applicable.

SDS or the last change to it:

Date of issue: August 23,2016 **Revised date:** Not applicable. Page 8/9

SAFETY DATA SHEET



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.
- 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.
- EU Regulation (EC) 1005/2009, (EC) 805/2004, (EU) 649/2012, (EC) 1907/2006, (EC) 1272/2008 and Their Amendments.

Abbreviations:

EU: European Union.

CLP: Regulation in the European Union through Classification and Labelling of Chemicals.

TSCA: Toxic Substances Control Act.

OSHA HCS: Occupational Safety and Health Act, Hazard Communication Standard (USA).

GHS: Globally Harmonized System of Classification and Labelling of Chemicals.

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.

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative.

Date of issue: August 23,2016 **Revised date:** Not applicable. Page 9/9