



IDEMITSU

SAFETY DATA SHEET

Issue Date 19-Jul-2013

Revision date 08-Jan-2015

Version 2

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product identifier

Product name IDEMITSU SN/GF-5 0W-20 FULLY-SYNTHETIC

Other means of identification

Product Code LV-156

Recommended use of the chemical and restrictions on use

Recommended Use Lubricant

Details of the supplier of the safety data sheet

Manufacturer

IDEMITSU LUBE VIETNAM CO., LTD
Land lot CN5.2E, Dinh Vu IZ, Dong Hai 2 ward
Hai An Dist., Hai Phong City, Vietnam.
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Fax: +84.31.3246 509

Emergency telephone number

24 Hour Emergency Phone Number
United States and Canada:+1 215 207 0061
Mexico:+52 555 004 8763
Brazil:+55 113 711 9144
East/South East Asia:+65 3158 1074
Korea +82 (0) 234 798 401(South Korea in country number)
Australia +61 2801 44558
New Zealand +64 9929 1483

SECTION 2: Hazards identification

Classification

Label elements

Emergency Overview

Appearance clear

Physical state liquid

Odor characteristic

Hazards not otherwise classified (HNOC)

- Harmful to aquatic life with long lasting effects
- Harmful to aquatic life
- Not Applicable

Other Information

4.3% of the mixture consists of ingredient(s) of unknown toxicity

SECTION 3: Composition/information on ingredients

chemical name	CAS No	weight-%	Trade Secret
PETROLEUM HYDROCARBON (MINERAL OIL)	-	>=90	*
LUBRICATING OIL ADDITIVE	-	<8	*
ZINC, BIS[O,O-BIS(2-ETHYLHEXYL) PHOSPHORODITHIOATO-S,S']-, (T-4)-	4259-15-8	<1	*

* The exact percentage (concentration) of composition has been withheld as a trade secret.

SECTION 4: First aid measures

first aid measures

Eye contact	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes.
Skin Contact	Wash skin with soap and water.
INHALATION	Move to fresh air in case of accidental inhalation of vapors or decomposition products. (Get medical attention immediately if symptoms occur.).
INGESTION	If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

Most important symptoms and effects, both acute and delayed

Symptoms No information available.

Indication of any immediate medical attention and special treatment needed

SECTION 5: FIRE FIGHTING MEASURES

Suitable Extinguishing Media

CO2, dry chemical, dry sand, alcohol-resistant foam.

Unsuitable Extinguishing Media Caution: Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the chemical

The product causes burns of eyes, skin and mucous membranes. Thermal decomposition can lead to release of irritating and toxic gases and vapors. In the event of fire and/or explosion do not breathe fumes.

Explosion Data

Sensitivity to Mechanical Impact none.

Sensitivity to Static Discharge none.

Protective equipment and precautions for firefighters

Wear self-contained breathing apparatus and protective suit. Use personal protective equipment as required.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation, especially in confined areas.

For emergency responders Use personal protection recommended in Section 8.

Environmental precautions

Environmental precautions Should not be released into the environment.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Use personal protective equipment as required. Dam up. Cover liquid spill with sand, earth or other non-combustible absorbent material. Take up mechanically, placing in appropriate containers for disposal. Clean contaminated surface thoroughly.

SECTION 7: Handling and storage

Precautions for safe handling

Advice on safe handling Use personal protective equipment as required. Avoid breathing vapors or mists.

Conditions for safe storage, including any incompatibilities

Storage Conditions Store at ambient conditions. Store in accordance with local regulations.

Incompatible materials None known based on information supplied.

SECTION 8: Exposure controls/personal protection

Control parameters

Exposure Guidelines This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
PETROLEUM HYDROCARBON (MINERAL OIL)	5mg/m ³	-	-

chemical name	ACGIH TLV
PETROLEUM HYDROCARBON (MINERAL OIL)	5mg/m ³

Appropriate engineering controls

Engineering Controls Ensure adequate ventilation, especially in confined areas.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Skin and body protection Suitable protective clothing.

Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required. In case of inadequate ventilation wear respiratory protection.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Color	brown
Appearance	clear
Physical state	liquid
Odor	characteristic

<u>Property</u>	<u>Values</u>	<u>Remarks</u>
pH	No data available	
Melting point/freezing point		
melting point	No information available	
Pour point	-50.0 °C	
freezing point	No information available	
Initial boiling point	270 °C Or more	
flash point	218 °C / 424 °F	Cleveland Open Cup
Flammability Limits in Air		
Upper flammability limits	7 vol%	
Lower flammability limit	1vol%	
Density @15°C	0.8476 g/cm3	
Solubility(ies)		
Water solubility	Insoluble in water	
Kinematic viscosity 40°C	45.43 mm2/s	
Kinematic viscosity 100°C	8.706 mm2/s	
Dropping point	No information available	

SECTION 10: Stability and reactivity

Reactivity

No data available

Chemical stability

Stable under normal conditions.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to avoid

Strong oxidizing agents. Heat, flames and sparks.

Incompatible materials

None known based on information supplied.

Hazardous Decomposition Products

Thermal decomposition can lead to release of irritating and toxic gases and vapors.

SECTION 11: Toxicological information

Information on likely routes of exposure

Product Information	No data available
INHALATION	No data available.
Eye contact	No data available.
Skin Contact	No data available.
INGESTION	No data available.

chemical name	Acute toxicity (LD50) -Oral-	Acute toxicity (LD50) -Dermall-	Inhalation LC50
ZINC, BIS[O,O-BIS(2-ETHYLHEXYL) PHOSPHORODITHIOATO-S,S']-, (T-4)- 4259-15-8	= 3100 mg/kg (Rat)	> 5000 mg/kg (Rabbit)	-

Information on toxicological effects

Symptoms No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization	No information available.
Germ cell mutagenicity	No information available.
Carcinogenicity	No information available. <i>ACGIH (American Conference of Governmental Industrial Hygienists)</i> <i>A2 - Suspected Human Carcinogen</i> <i>IARC (International Agency for Research on Cancer)</i> <i>Group 1 - Carcinogenic to Humans</i> <i>Not classifiable as a human carcinogen</i> <i>OSHA (Occupational Safety and Health Administration of the US Department of Labor)</i> <i>X - Present</i>
Reproductive toxicity	No information available.
STOT - single exposure	No information available.
STOT - repeated exposure	No information available.
Aspiration hazard	Not classified.

Numerical measures of toxicity - Product Information

Unknown Acute toxicity 4.3% of the mixture consists of ingredient(s) of unknown toxicity
The following values are calculated based on chapter 3.1 of the GHS document .

SECTION 12: Ecological information

Ecotoxicity

4.3% of the mixture consists of component(s) of unknown hazards to the aquatic environment

chemical name	Algae/aquatic plants	Fish	Toxicity to Microorganisms	Crustacea
ZINC, BIS[O,O-BIS(2-ETHYLHEXYL) L) PHOSPHORODITHIOATO- S,S']-, (T-4)- 4259-15-8	1.0 - 5.0: 96 h Pseudokirchneriella subcapitata mg/L EC50	10.0 - 35.0: 96 h Pimephales promelas mg/L LC50 semi-static 1.0 - 5.0: 96 h Pimephales promelas mg/L LC50 static		1 - 1.5: 48 h Daphnia magna mg/L EC50

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Mobility

No information available.

Other adverse effects

No information available

SECTION 13: Disposal considerations**Waste treatment methods****Disposal of wastes**

Improper disposal or reuse of this container may be dangerous and illegal.

Contaminated packaging

Do not reuse container.

This product contains one or more substances that are listed with the State of California as a hazardous waste.

chemical name	California Hazardous Waste Status
ZINC, BIS[O,O-BIS(2-ETHYLHEXYL) PHOSPHORODITHIOATO-S,S']-, (T-4)- 4259-15-8	Toxic
ZINC, BIS[O,O-BIS(1,3-DIMETHYLBUTYL) PHOSPHORODITHIOATO-S,S']-, (T-4)- 2215-35-2	Toxic

SECTION 14: Transport information**DOT**

Not regulated

TDG

Not regulated

IATA

Not regulated

IMDG

Not regulated

ADR

Not regulated

IBC

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

Not regulated

Proper shipping name
CATEGORY

Not regulated

Not regulated

SECTION 15: Regulatory information**US Federal Regulations****SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

chemical name	CAS No	weight-%	SARA 313 - Threshold Values %
ZINC, BIS[O,O-BIS(2-ETHYLHEXYL) PHOSPHORODITHIOATO-S,S']-, (T-4) - 4259-15-8	4259-15-8	<1	1.0

SARA 311/312 Hazard Categories

Acute health hazard	No
Chronic Health Hazard	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
ZINC, BIS[O,O-BIS(2-ETHYLHEXYL) PHOSPHORODITHIOATO- S,S']-, (T-4)- 4259-15-8		X		

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

US State Regulations**California Proposition 65**

This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations

chemical name	New Jersey	Massachusetts	Pennsylvania
ZINC, BIS[O,O-BIS(2-ETHYLHEXYL) PHOSPHORODITHIOATO-S,S']-, (T-4)- 4259-15-8	X		X

U.S. EPA Label Information

EPA Pesticide Registration Number Not Applicable

International Inventories

ENCS	Complies
TSCA	Complies
EINECS/ELINCS	Complies
DSL	Complies
AICS	Complies
KECL	Complies
PICCS	Complies
China (IECSC)	Complies
NZIoC	Complies
Taiwan	Complies

SECTION 16: Other information

NFPA	Health hazards 0	Flammability 1	Instability 0	Physical and Chemical Properties -
HMIS	Health hazards 0	Flammability 1	Physical hazards 0	Personal protection X

Issue Date 19-Jul-2013
Revision date 08-Jan-2015
Revision Note
No information available

Disclaimer

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet