SAFETY DATA SHEET

1 PRODUCT AND COMPANY IDENTIFICATION

I PRODUCT AND COMPANY IDENTIFICATION				
Product Name :	DG-1			
Identification of Substance/Preparat	tion			
:]	Lubricating Grease			
SDS NO. : 1	RD16364_Eng			
Company Identification				
Manufacture & Distributor :	SHIMANO NORTH AMERICA FISHING, INC.			
Address :	9560 Palmetto Commerce Parkway Ladson, South Carolina 29456 U.S.A.			
Emergency Phone number :	+1-949-951-5003 (Business Hours Only)			
Manufacture & Distributor :	SHIMANO EUROPE B.V.			
Address :	High Tech Campus 92 NL-5656 AG Eindhoven, The Netherlands			
Emergency Phone number :				
Manufacture & Distributor :	SHIMANO INC.			
Address : 1	3-77 Oimatsu-cho Sakaiku Sakai OSAKA 5908577, JAPAN			

2. HAZARDS IDENTIFICATION

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	: Not classified.
and mixtures	
Corrosive to metals	: Not classified.
Health hazards	
Acute toxicity-Oral	: Classification not possible.
	: Classification not possible.
Acute toxicity	: Classification not possible.
-Inhalation: mist	
Skin corrosion/irritation	: Classification not possible.
Eye damage/ irritation	: Classification not possible.
Sensitization-Respiratory	: Classification not possible.
Sensitization-Skin	: Classification not possible.
• •	: Classification not possible.
	: Classification not possible.
	: Classification not possible.
Specific target organ toxicity	: Classification not possible.
-Single exposure	
Specific target organ toxicity	: Classification not possible.
-Repeated exposure	
Aspiration hazard	: Classification not possible.
Environmental hazards	
Hazardous to the aquatic env	vironment -Acute (short-term) aquatic toxicity
	: Classification not possible.
Hazardous to the aquatic on	vironment 'Chronic (long term) equatic toxicity

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.

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.

Other hazards

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Other hazards which do not result in classification:

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

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

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/mixture

: Mixture

Ingredient(s):

Chemical Name	CAS#	EC #	Wt%	EU	EU	USA	ACGIH	EU
generic name	CA3#	EC #	VV L%0	Hazard class	Category code	OSHA PEL	TLV	ILV
Synthetic Hydrocarbon base oil	Confidential	Confidential	45-55	None	None	Not established	Not established	Not established
Organophilic clay thickener	Confidential	Confidential	5-15	None	None	Not established	Not established	Not established
Additive (Poly tetra fluoro ethylene, etc.)	Confidential	Confidential	35-45	None	None	Not established	Not established	Not established

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

4. FIRST-AID MEASURES				
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.			

Most important symptoms and effects, both acute and delayed

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

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.

5. FIRE-FIGHTING MEASURES	
Extinguishing Media	
Suitable extinguishing media	 a : Use water fog, foam, dry chemical or carbon dioxide to extinguish flames. a : DO NOT use forcible water. See SECTION 11 for more detailed information on health effects and symptoms.
Special hazards arising from the Hazards from the substance o	
nazarus nom the substance o	: In a fire or if heated, a pressure increase will occur and the container may burst.
Hazardous combustion produ	
	: Combustion products may include the following:Carbon oxides (CO, CO2). HF, COF2. Decomposition at flame temperatures may form toxic fluorine compounds. Avoid breathing decomposition products.
Advice for firefighters Special precautions for fire-fight	ers : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
Special protective equipment for	r fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus with a full face-piece operated in positive pressure mode.
6. ACCIDENTAL RELEASE MEAS	URES
	e equipment and emergency procedures
For non-emergency personnel	: Eliminate all ignition sources. Evacuate surrounding areas.
For emergency responders	: Particular danger of slipping on leaked/spilled product.
Environmental precautions Should be prevented from cor	ntaminating soil or from entering sewage and drainage systems and bodies of water.
Methods and material for contai	nment and cleaning up
Small spil	: 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.
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.
7. HANDLING AND STORAGE	
Precautions for safe handling	
Protective measures	: Put on appropriate personal protective equipment (see SECTION8).
Advice on general occupational hygien	: Workers should wash hands and face before eating, drinking and smoking. Avoid contact with eyes,
Conditions for safe storage, inclu	iding 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. e : Prolonged exposure to elevated temperature.
Specific end use(s)	No further relevant information available.

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8. EXPOSURE CONTROLS/PERSONAL PROTECTION

0. EXI OSOKE CONTROLS/TERSONILLI ROTECTION		
Control Parameters : No exposure limit value know OHSA PEL: Not established ACGIH TLV: Not established NIOSH REL: Not established	vn on the	e product itself.
EU ILV: Not established		
Exposure controls		
Appropriate engineering controls : When mist is generated, the l		
о , ,	•	kin cleaning purposes should be present.
Individual protection measures, such as personal protective equip	pment	
Eye/face protection : \square Required \square Not required	d	Wear safety glasses with side shields.
Skin(hand/other) protection : Required Not required	d	To prevent contact, wear impervious clothing such as gloves, apron.
Respiratory protection : Required Not required	d	No special respiratory protection equipment is required under normal conditions of use with adequate ventilation.
Ir	۱ case of i	nsufficient ventilation, wear suitable respiratory equipment.
Thermal hazards : \Box Required \Box Not require	d	Not normally required.
	u	Not normany required.
Environmental exposure controls : Avoid release to the environmental exposure controls and the environmental exposure controls are set of the environmental exposure c	ment.	
9. PHYSICAL AND CHEMICAL PROPERTIES Typical Values		
Information on basic physical and chemical properties		
Appearance	:	Smooth, white, semi-solid.
Odor	:	Odorless
Odor threshold	:	Not determined.
pH	:	Not determined.
Melting point/ freezing point(°C)	:	Not determined.
Initial boiling point and boiling range (°C)	:	Undetermined.
Flash point(°C)	:	>200 (SETA)
Evaporation rate	:	Not determined.
Upper/lower flammability or explosive limits	:	Not determined.
Vapor pressure	:	Not determined.
Relative density	:	Not determined.
Density/specific gravity	:	Ca. 1.1 (25°C)
Solubility(ies)	:	Negligible (in water).
Partition coefficient: n-octanol/water		Not determined.
Auto-ignition temperature(°C)		Not determined.
Decomposition temperature(°C)	:	Not determined.
Viscosity(m Pa s)	:	Not determined.
Explosive properties	:	Not determined.
Oxidizing properties	:	Not determined.
Otherinformation		

Other information

No further relevant information available.

10. STABILITY AND REACTIVITY			
Reactivity	No specific test data available for this product.		
Chemical stability	⊡Stable □Unstable		
Possibility of hazardous reactions	May occur		
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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			
Carbon oxides (CO, CO2). HF,COF2			
	Decomposition at flame temperatures may form toxic fluorine compounds.		

11. TOXICOLOGICAL INFORMATION

Information on toxicological effe	ects		
Likely routes of exposure	: Eye contact, skin, ingestion.		
Symptoms related to the physical, chemical, and toxicological characteristics			
	: See SECTION 4 for skin contact, eye contact, and ingestion.		
Delayed and immediate effects a	nd 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.		
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 to	xicity 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.		

12. ECOLOGICAL INFORMATION

Toxicity	
Aquatic	: No further relevant information available.
Terrestrial	: No further relevant information available.

Persistence and degradability

No specific test data available for this product.

Bioaccumulative potential

No specific test data available for this product.

Mobility in soil

No specific test data available for this product.

Results of PBT and vPvB assessment Not applicable.

Other adverse effects No additional information available.

13. DISPOSAL CONSIDERATIONS

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.

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14. TRANSPORT INFORMATION

UN number	Not regulated.
UN proper shipping name	Not regulated.
Transport hazard class(es)	Not regulated.
Packing group	Not regulated.
Environmental hazards Marine pollutant:	□Yes Chemical name (wt%) ☑No
Special precautions for user :	Not applicable.
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Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code : Not applicable.

15. REGULATORY INFORMATION

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

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(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(HNOC)	: Not applicable.	
Percentage of ingredient(s) wit	h unknown toxicity	

Percentage of ingredient(s) with unknown toxicity : Not applicable. SARA Title III § 313 Chemical name:None. Wt%:

California Proposition 65	Chemical name:None. Wt%:
Others	No further relevant information ava

No further relevant information available.

Chemical safety assessment

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

16. OTHER INFORMATION

Other information

No additional information available.

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.

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