

SAFETY DATA SHEET

1 Chemical Product and Company Identification

Product Name : ACE-2 GREASE

Identification of Substance/Preparation

: GREASE

Application : Industrial Lubricating Grease

SDS No. : BNT2958_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 : +31-402-612222 (Business Hours Only)

Manufacture & Distributor : SHIMANO INC.

Address : 3-77 Oimatsu-cho Sakaiku Sakai OSAKA 5908577, JAPAN

2. HAZARDS IDENTIFICATION

[GHS LABEL ELEMENTS]

PHYSICO-CHEMICAL HAZARDS : No applicable GHS classification data.

HEALTH HAZARDS : No applicable GHS classification data.

ENVIRONMENTAL HAZARDS : No applicable GHS classification data.

[GHS LABEL ELEMENTS]

Pictogram : None

Signal Word : None

Hazard Statement : None

Precautionary Statement : None

Other notes : Even if there is no description in the precautionarystatement based on GHS classification, sufficientconsideration should be given to Safety measures / Firstaid measures / Storage / Disposal by referring to theirinformation in the following chapters.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance or Preparation : Mixture

Component	Content(%)
Synthetic oil	40-50
Mineral oil	30-40
Thickener	5-10
Additive	10-20

4. FIRST-AID MEASURES

- Inhalation : If inhalation of mists, fumes or vapor causes irritation to the nose or throat, or coughing, remove to fresh air comfortable for breathing.
: If symptoms persist obtain medical advice.
- Skin contact : Wash skin thoroughly with soap and water as soon as reasonably practicable.
: If skin irritation occurs obtain medical advice.
- Eye contact : Wash eye thoroughly with clean water.
: Obtain medical advice if any pain or redness develops or persists.
- Ingestion : If contamination of the mouth occurs, wash out thoroughly with water.
Except as a deliberate act, the ingestion of large amounts of product is unlikely.
If it should occur, do not induce vomiting; obtain medical advice.
- Most important symptoms and effects, both acute and delayed
: See Section 11 for more detailed information on health effects and symptoms.

Necessary precautions for protection of person performing first aid measures

: No information

Special precautions for doctors

: No information

5. FIRE-FIGHTING MEASURES

- Extinguish media : Use foam, dry powder or water fog, carbon dioxide.
- Extinguishing media that do not use it
: Do not use water jets.
- Specific hazards arising from the substance or mixture
: Toxic fumes may be evolved on burning or exposure to heat. See Section 10 for information on stability and reactivity.
- Fire Fighting : Eliminate all ignition sources if safe to do so.
: Water the surrounding equipment to cool them down.
: Cordon off the affected place and its vicinity to all, except the concerned parties.
- Specific protective equipment for firefighters
: Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).

6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency
: Use appropriate Personal Protective Equipment (PPE).
: Evacuate all non essential personnel from the immediate area.
- Environmental precautions : Prevent leakage into sewer, rivers and etc., and take measures to prevent environmental pollution.
- Methods and material for containment and cleaning up
: Absorb and recover by use of sand or other suitable inert absorbent material.
: In a large leakage, enclose it with sand bank and stop outflow, and recover spilled material into containers. In event of spillage in the sea, extend oil fences to prevent diffusion, and sop up with absorbent materials. In event of using chemicals and/or detergents, they must satisfy the technical standards as set by the Ministry of Land, Infrastructure and Transport.
- Prevention measure of secondary disaster
: In the case of large spills contact the appropriate authorities.
: Promptly remove ignition sources nearby.

7. HANDLING AND STORAGE

Handling

- Technical measures : Keep away from flame or high temperature, and avoid, whenever possible, a generation of vapor.
: Take measures against static discharge. Ensure to wear clothing and shoes made of conductive materials.
: Never suck up (siphoning) this material by mouth.
: Wear personal protective equipment if there exists a chance of getting contact with skin or enter into eye.
: Do not breathe dust, vapor, spray.
- Precautions : No information available
- Precautions for safe handling : Perform local exhaust and general ventilation as described in "8. Exposure controls/personal protection".
- Avoid contact : Avoid contact with halogens, strong acids, alkali and oxidizing materials.
- Hygiene measures : Whilst using do not eat, drink or smoke.
: Wash hands thoroughly after contact.

Storage

- Storage conditions : Store in a cool and well-ventilated place away from direct sunlight.
: Keep container tightly closed.
: Avoid heat, sparks, open flame and static accumulation.
- Safe container packaging materials : Do not pressurize empty containers. May cause rupture.
: Do not weld, heat up, drill or cut containers. May ignite the residue and cause explosion.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Chemical name	Administrative levels	Japanese Society of Occupational Health	ACGIH
Synthetic oil	-	-	
Mineral oil	-	3mg/m ³	TWA: 5mg/m ³
Thickener	-	-	
Additive	-	-	

- Equipment : Install the appropriate general ventilation equipment, local exhaust ventilation in the workplace.
: Install eye shower and body shower near the work site.
- Personal protection
- Respiratory protection : Use respiratory equipment appropriately in response to the circumstances.
- Hand protection : Use oil-proof protective hand gloves appropriately in response to the circumstances.
- Eye protection : Use safety glasses with side protection appropriately in response to the circumstances.
- Skin protection : Use protective clothing appropriately in response to the circumstances.
- Special precautions : No information

9. Physical and chemical properties

Physical state	: Solid
Color	: Milky yellow
Odor	: Slight odor
Melting point	: 150°C(Drop point)
Boiling point/Boiling range	: No information available
Flammability	: No information available
Range of explosion (lowerbound - upper bound)	: 1-7vol%(estimated)
Flash point	: 200°C \geq (SETA)
Autogenous ignition point	: No information available
Decomposition temperature	: No information available
pH	: No information available
Kinematic viscosity	: No information available
Solubility	: Water: insoluble
Water partition coefficient	: No information available
Vapor pressure	: No information available
Density/Specific gravity	: No information available
Vapor density	: No information available
Particle characteristics	: No information available

10. Stability and reactivity

Reactivity	: Stable under normal conditions of use and unlikely to react.
Chemical stability	: Stable under normal storage conditions.
Possibility of hazardous reactions	: No hazardous reaction known under conditions of normal use.
Conditions to avoid	: Heat. Incompatible materials.
Incompatible materials	: Halogens, strong acids, alkalies and oxidizing agents.
Hazardous decomposition products	: Incomplete combustion/ thermal decomposition will generate smoke, carbon dioxide and hazardous gases, which will include carbon monoxide.

11. TOXICOLOGICAL INFORMATION

The hazard classification of products was classified based on the classification criteria of the mixture.

Acute toxicity(oral)	
Synthetic oil	: Not classified
Acute toxicity(dermal)	
Synthetic oil	: Not classified
Acute toxicity(inhalation: gases)	
Synthetic oil	: Exempt classification
Acute toxicity(inhalation: vapors)	
Synthetic oil	: Exempt classification
Acute toxicity(inhalation: dusts and mists)	
Synthetic oil	: Exempt classification
Skin corrosion/Skin irritation	
Synthetic oil	: Not classified
Serious eye damage/Eye irritation	
Synthetic oil	: Not classified
Respiratory sensitizer	
Synthetic oil	: Not classified
Skin sensitizer	
Synthetic oil	: Not classified
Germ cell mutagenicity	
Synthetic oil	: Not classified
Carcinogenicity	
Synthetic oil	: Not classified
Toxic to reproduction/Effects on or via lactation	
Synthetic oil	: Not classified/Not classified
Specific target organ toxicity(single exposure)	
Synthetic oil	: Classification not possible
Specific target organ toxicity(repeated exposure)	
Synthetic oil	: Classification not possible
Aspiration hazard	
Synthetic oil	: Classification not possible

12. ECOLOGICAL INFORMATION

The hazard classification of products was classified based on the classification criteria of the mixture.

Hazard to the aquatic environment (acute)	
Synthetic oil	: Not classified
Hazard to the aquatic environment (chronic)	
Synthetic oil	: Not classified
Hazardous to the ozone layer	
Synthetic oil	: Classification not possible
Toxicity to fish	: No information available
Toxicity to invertebrate	: No information available
Toxicity for algae	: No information available
Persistence and degradability	No information available
Bioaccumulative potential	No information available
Mobility in soil	No information available

13. DISPOSAL CONSIDERATIONS

- Rest waste : Dispose of via an authorized person/ licensed waste disposal contractor in accordance with local regulations.
: Be discarded in accordance with the standards of the local government and relevant legislation.
: Incineration may be carried out under controlled conditions provided that local regulations for emissions are met.
- A pollution container, packing : When disposing of empty containers, after the contents have been completely removed, and the mixture is processed in accordance with the standards of the local government as well as the related laws and regulations and waste disposal method.

14. TRANSPORT INFORMATION

- UN Number : No information available
Proper Shipping name : No information available
Class : No information available
Packing Group : No information available
Special safety measures for transport or means of transport : Transport the container without significant friction or agitation.
: Comply with applicable laws and regulations.
- Domestic restriction
- Land : Follow the transportation method specified by Fire Service Act and Industrial Safety and Health Law.
Sea : Follow the transportation method specified by Ship Safety Law.
Air : Follow the transportation method specified by Civil Aeronautics Law.

15. REGULATORY INFORMATION

- Fire Service Act : Non hazardous materials
Pollutant Release and Transfer Register (PRTR) : Not Regulated
Industrial Safety and Health Law : Regulated
Poisonous and Deleterious Substances Control Law : Not Regulated
Water Pollution Control Law : Regulated
Sewage Control Law : Regulated
Marine Pollution Prevention Law : Regulated

16. OTHER INFORMATION

Disclaimer

The information above is believed to be accurate and represents the best information currently available to us. We have reviewed any information contained herein which we received from sources outside SHIMANO INC.. However, no warranty or representation, express or implied is made as to the accuracy or completeness of the data and information contained in this data sheet.

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