

SAFETY DATA SHEET

XTeer Grease 1

Date of issue: 2016-06-29

Revision date: 2016-07-19

Version: R0002.0002

1. IDENTIFICATION

A. Product name

- XTeer Grease 1

B. Recommended use and restriction on use

- General use : Automotive Wheel Bearing Lubricating
- Restriction on use : Not available

C. Manufacturer / Supplier / Distributor information

- Company name : Hyundai Oilbank Co., Ltd.
- Address : 20F, Yonsei Severance Bldg., Tongil-ro 10-gil, Jongno-gu, Seoul, Korea
- Dept. : Production&Technology Team
- Telephone number : 02-2004-3000
- Emergency telephone number : 02-2004-3000

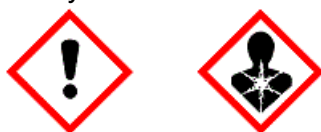
2. HAZARD IDENTIFICATION

A. GHS Classification

- Acute Toxicity (Inhalation: dust / mist) : Category4
- Skin corrosion/irritation : Category2
- Serious eye damage/irritation : Category2A
- Specific target organ toxicity(Repeated exposure) : Category2

B. GHS label elements

○ Hazard symbols



○ Signal words

- Warning

○ Hazard statements

- H315 Causes skin irritation
- H319 Causes serious eye irritation
- H332 Harmful if inhaled
- H373 May cause damage to organs through prolonged or repeated exposure (Refer Section SDS 11)

○ Precautionary statements

1) Prevention

- P260 Do not breathe dust/fume.
- P261 Avoid breathing dust/fume.
- P264 Wash hands thoroughly after handling.
- P271 Use only outdoors or in a well-ventilated area.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.

2) Response

- P302+P352 IF ON SKIN: Wash with plenty of soap and water.

- P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P312 Call a POISON CENTER or doctor/physician if you feel unwell.
- P314 Get medical advice/attention if you feel unwell.
- P321 Specific treatment
- P332+P313 If skin irritation occurs: Get medical advice/attention.
- P337+P313 If eye irritation persists: Get medical advice/attention.
- P362 Take off contaminated clothing and wash before reuse.

3) Storage

- Not applicable

4) Disposal

- P501 Dispose of contents/container in accordance with local/regional/national/international regulation

C. Other hazards which do not result in classification : (NFPA Classification)

○ NFPA grade (0 ~ 4 level)

- Health : 2, Flammability : 1, Reactivity : 0

3. COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical Name | Trade names and Synonyms | CAS No. | Content(%) |
|--|--------------------------|------------|------------|
| Distillates (petroleum), hydrotreated heavy paraffinic | - | 64742-54-7 | 87~95 |
| 12-Hydroxyoctadecanoic acid monolithium salt | - | 7620-77-1 | 5~10 |

4. FIRST AID MEASURES

A. Eye contact

- Do not rub your eyes.
- Immediately flush eyes with plenty of water for at least 15minutes and call a doctor/physician.
- Get medical attention immediately.
- Go to the hospital immediately if symptoms(flare, irritate) occur.
- Remove contact lenses if worn.

B. Skin contact

- Flush skin with plenty of wter for at least 15 minutes while removing contaminated clothing and shoes.
- Laundering enough contaminated clothing before reuse.
- Get medical attention immediately.
- Go to the hospital immediately if symptoms(flare, irritate) occur.
- Wash thoroughly after handling.

C. Inhalation contact

- When exposed to large amounts of steam and mist, move to fresh air.
- Take specific treatment if needed.
- Get medical attention immediately.
- If breathing is stopped or irregular, give artificial respiration and supply oxygen.

D. Ingestion contact

- About whether I should induce vomiting Take the advice of a doctor.
- Rinse your mouth with water immediately.
- Get medical attention immediately.

E. Delayed and immediate effects and also chronic effects from short and long term exposure

- Not available

F. Notes to physician

- Notify medical personnel of contaminated situations and have them take appropriate protective measures.

5. FIREFIGHTING MEASURES

A. Suitable (Unsuitable) extinguishing media

- Dry chemical, carbon dioxide, regular foam extinguishing agent, spray
- Avoid use of water jet for extinguishing

B. Specific hazards arising from the chemical

- Not available

C. Special protective actions for firefighters

- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- Notify your local firestation and inform the location of the fire and characteristics hazard.
- Using a unattended and water devices in case of large fire and leave alone to burn if you do not imperative.
- Avoid inhalation of materials or combustion by-products.
- Do not access if the tank on fire.
- Keep containers cool with water spray.

6. ACCIDENTAL RELEASE MEASURES

A. Personal precautions, protective equipment and emergency procedures

- Must work against the wind, let the upwind people to evacuate.
- Do not touch spilled material. Stop leak if you can do it without risk.
- Move container to safe area from the leak area.
- Handling the damaged containers or spilled material after wearing protective equipment.
- Avoid skin contact and inhalation.

B. Environmental precautions

- Prevent runoff and contact with waterways, drains or sewers.
- If large amounts have been spilled, inform the relevant authorities.

C. Methods and materials for containment and cleaning up

- Large spill : Stay upwind and keep out of low areas. Dike for later disposal.
- Notification to central government, local government. When emissions at least of the standard amount
- Dispose of waste in accordance with local regulation.
- Appropriate container for disposal of spilled material collected.
- Small liquid state spills: Appropriate container for disposal of spilled material collected.
- For disposal of spilled material in appropriate containers collected and clear surface.

7. HANDLING AND STORAGE

A. Precautions for safe handling

- Since emptied containers retain product residue(vapor, liquid, solid) follow all MSDS and label warnings even after container is emptied.
- Get the manual before use.
- Operators should wear antistatic footwear and clothing.

B. Conditions for safe storage, including any incompatibilities

- Check regularly for leaks.
- Do not use damaged containers.
- Do not apply direct heat.
- Do not apply any physical shock to container.
- Keep sealed when not in use.
- Collected them in sealed containers.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

A. Exposure limits

- ACGIH TLV**
 - [Distillates (petroleum), hydrotreated heavy paraffinic] : TWA 5 mg/m³, Inhalable particulate matter(Mineral oil, Pure, highly and severely refined)
- OSHA PEL**
 - Not available

B. Engineering controls

- A system of local and/or general exhaust is recommended to keep employee exposures above the Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. The use of local exhaust ventilation is recommended to control emissions near the source.

C. Individual protection measures, such as personal protective equipment

- Respiratory protection**
 - Under conditions of frequent use or heavy exposure, Respiratory protection may be needed.
 - Respiratory protection is ranked in order from minimum to maximum.
 - Consider warning properties before use.
 - Dust, mist, fume-purifying respiratory protection
 - Any air-purifying respirator with a corpuscle filter of high efficiency
 - Any respiratory protection with a electromotion fan(for dust, mist, fume-purifying)
 - Self-contained breathing apparatus with a corpuscle filter of high efficiency
 - For Unknown Concentration or Immediately Dangerous to Life or Health : Any supplied-air respirator with full facepiece and operated in a pressure-demand or other positive-pressure mode in combination with a separate escape supply. Any self-contained breathing apparatus with a full facepiece.
- Eye protection**
 - Wear primary eye protection such as splash resistant safety goggles with a secondary protection face shield.
 - Provide an emergency eye wash station and quick drench shower in the immediate work area.
- Hand protection**
 - Wear appropriate glove.
- Skin protection**
 - Wear appropriate clothing.
- Others**
 - Not available

9. PHYSICAL AND CHEMICAL PROPERTIES

| | |
|---|---------------------|
| A. Appearance | |
| - Appearance | Solid(Other) |
| - Color | Clear, light yellow |
| B. Odor | Slight odor |
| C. Odor threshold | No data available |
| D. pH | Not available |
| E. Melting point/Freezing point | No data available |
| F. Initial Boiling Point/Boiling Ranges | Not available |
| G. Flash point | > 200 °C |
| H. Evaporation rate | No data available |
| I. Flammability(solid, gas) | No data available |
| J. Upper/Lower Flammability or explosive limits | No data available |
| K. Vapour pressure | No data available |
| L. Solubility | No data available |
| M. Vapour density | No data available |
| N. Specific gravity(Relative density) | 0.852 |
| O. Partition coefficient of n-octanol/water | No data available |
| P. Autoignition temperature | No data available |

| | |
|------------------------------|-------------------|
| Q. Decomposition temperature | No data available |
| R. Viscosity | No data available |
| S. Molecular weight | No data available |

10. STABILITY AND REACTIVITY

A. Chemical Stability

- This material is stable under recommended storage and handling conditions.

B. Possibility of hazardous reactions

- Hazardous Polymerization will not occur.

C. Conditions to avoid

- Avoid contact with incompatible materials and condition.
- Avoid : Accumulation of electrostatic charges, Heating, Flames and hot surfaces

D. Incompatible materials

- Not available

E. Hazardous decomposition products

- May emit flammable vapour if involved in fire.

11. TOXICOLOGICAL INFORMATION

A. Information on the likely routes of exposure

- (Respiratory tracts)**
 - Not available
- (Oral)**
 - Not available
- (Eye-Skin)**
 - Causes serious eye irritation
 - Causes skin irritation

B. Delayed and immediate effects and also chronic effects from short and long term exposure

- Acute toxicity**
 - * **Oral - ATE MIX : >5000mg/kg**
 - [Distillates (petroleum), hydrotreated heavy paraffinic] : LD50 > 15000 mg/kg Rat
 - * **Dermal - ATE MIX : >5000mg/kg**
 - [Distillates (petroleum), hydrotreated heavy paraffinic] : LD50 > 5000 mg/kg Rabbit
 - * **Inhalation - ATE MIX : 2.0mg/L~10.0mg/L**
 - [Distillates (petroleum), hydrotreated heavy paraffinic] : Mist LC50 = 2.18 mg/ℓ 4 hr Rat
- Skin corrosion/irritation**
 - Causes skin irritation
- Serious eye damage/irritation**
 - Causes serious eye irritation
- Respiratory sensitization**
 - Not available
- Skin sensitization**
 - Not available
- Carcinogenicity**
 - * **IARC**
 - Not available
 - * **OSHA**
 - Not available
 - * **ACGIH**
 - [Distillates (petroleum), hydrotreated heavy paraffinic] : A4

* **NTP**

- Not available

* **EU CLP**

- [Distillates (petroleum), hydrotreated heavy paraffinic] : Carc.1B

Germ cell mutagenicity

- Not available

Reproductive toxicity

- Not available

STOT-single exposure

- Not available

STOT-repeated exposure

- May cause damage to organs through prolonged or repeated exposure (Refer Section SDS 11)

Aspiration hazard

- Not available

12. ECOLOGICAL INFORMATION

A. Ecotoxicity

Fish

- [Distillates (petroleum), hydrotreated heavy paraffinic] : LC50 > 5000 mg/l 96 hr *Oncorhynchus mykiss*

Crustaceans

- [Distillates (petroleum), hydrotreated heavy paraffinic] : EC50 > 1000 mg/l 48 hr *Daphnia magna*

Algae

- [Distillates (petroleum), hydrotreated heavy paraffinic] : EC50 > 1000 mg/l 96 hr *Scenedesmus subspicatus*

B. Persistence and degradability

Persistence

- [Distillates (petroleum), hydrotreated heavy paraffinic] : log Kow = 3.9 ~ 6 (Estimates)

- [12-Hydroxyoctadecanoic acid monolithium salt] : log Kow 2.60

Degradability

- Not available

C. Bioaccumulative potential

Bioaccumulative potential

- [12-Hydroxyoctadecanoic acid monolithium salt] : BCF 56.23

Biodegradation

- [Distillates (petroleum), hydrotreated heavy paraffinic] : Biodegradability = 6 (%) 28 day (Aerobic, Domestic wastewater, does not decompose easily)

D. Mobility in soil

- Not available

E. Other adverse effects

- Not available

13. DISPOSAL CONSIDERATIONS

A. Disposal methods

- Since more than two kinds of designaed waste is mixed, it is difficult to treat seperatly, then can be reduction or stabilization by incineration or similar process.

- If water separation is possible, pre-process with Water separation process.

- Dispose by incineration.

B. Special precautions for disposal

- The user of this product must disposal by oneself or entrust to waste disposer or person who other's waste recycle and dispose, person who establish and operate waste disposal facilities.

- Dispose of waste in accordance with all applicable laws and regulations.

14. TRANSPORT INFORMATION**A. UN No. (IMDG)**

- Not available

B. Proper shipping name

- Not available

C. Hazard Class

- Not available

D. IMDG Packing group

- Not available

E. Marine pollutant

- Not applicable

F. Special precautions for user related to transport or transportation measures

- Local transport follows in accordance with Dangerous goods Safety Management Law.
- Package and transport follow in accordance with Department of Transportation (DOT) and other regulatory agency requirements.
- EmS FIRE SCHEDULE : Not available
- EmS SPILLAGE SCHEDULE : Not available

15. REGULATORY INFORMATION**A. National and/or international regulatory information**

- POPs Management Law**
 - Not applicable
- Information of EU Classification**
 - * **Classification**
 - [Distillates (petroleum), hydrotreated heavy paraffinic] : Carc. Cat. 2; R45
 - * **Risk Phrases**
 - [Distillates (petroleum), hydrotreated heavy paraffinic] : R45
 - * **Safety Phrase**
 - [Distillates (petroleum), hydrotreated heavy paraffinic] : S53, S45
- U.S. Federal regulations**
 - * **OSHA PROCESS SAFETY (29CFR1910.119)**
 - Not applicable
 - * **CERCLA Section 103 (40CFR302.4)**
 - Not applicable
 - * **EPCRA Section 302 (40CFR355.30)**
 - Not applicable
 - * **EPCRA Section 304 (40CFR355.40)**
 - Not applicable
 - * **EPCRA Section 313 (40CFR372.65)**
 - Not applicable
- Rotterdam Convention listed ingredients**
 - Not applicable
- Stockholm Convention listed ingredients**
 - Not applicable
- Montreal Protocol listed ingredients**
 - Not applicable

16. OTHER INFORMATION**A. Reference**

- The information contained herein is believed to be accurate. It is provided independently of any sale of the product for purpose of hazard communication. It is not intended to constitute performance information concerning the product. No express warranty, or implied warranty of merchantability or fitness for a particular purpose is made with respect to the product or the information contained herein.
- This Safety Data Sheet was compiled with data and information from the following sources: KOSHA, NITE, ESIS, NLM, SIDS, IPCS

B. Issue date

- 2016-06-29

C. Revision number and Last date revised

- 2 times, 2016-07-19

D. Other

- This SDS is prepared according to the Globally Harmonized System (GHS).