Safety Data Sheet

1. Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier
MAINTENANCE GREASE

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

1.3. Details of the supplier of the safety data sheet
Manufacture's name: Roland DG Corporation
Address: 1-6-4 Shinmiyakoda, Kita-ku, Hamamatsu-shi, Shizuoka-ken, 431-2103
JAPAN
Phone: + 81-53-484-1224
Fax: + 81-53-484-1226

E-mail Address:  
Reversed date: 28 December, 2015

1.4. Emergency telephone:

2. Hazard identification

2.1. Classification of the substance or mixture
This product is classified as dangerous according to GHS.
Sensitization - skin Category 1
Germ cell mutagenicity Category 2
Specific target organ toxicity Category 2
(Repeatef exposure)
Hazardous to the aquatic environment - acute hazard Category 3
Hazardous to the aquatic environment - long-term hazard Category 3
2.2. GHS label elements, including precautionary statements

Pictogram

![Exclamation Mark and a Symbol]

Signal word(s)  Warning
Hazard statement(s)
- May cause an allergic skin reaction.
- Suspected of causing genetic defects.
- May cause damage to organs through prolonged or repeated exposure.
- Harmful to aquatic life.
- Harmful to aquatic life with long lasting effects.

Precautionary statement(s)
Prevention
- Do not handle until all safety precautions have been read and understood.
- Do not breathe dust/fume/gas/mist/vapours/spray.
- Avoid release to the environment.
- Wear protective gloves/protective clothing/eye protection/face protection.

Response
- IF ON SKIN: Wash with plenty of soap and water.
- IF exposed or concerned: Get medical advice/attention.

2.3. Other hazards
Potential Health Effects:
- Eyes: Contact with eye will be irritating.
- Skin: Contact with skin may cause irritation, swelling or redness, allergy and/or sensitization.
- Inhalation: Exposure to vapors (mist) may cause genetic defects.
- Ingestion: May cause injury of mouth, throat, and stomach.
- Chronic Health Hazards: Repeated skin contact may cause a persistent irritation or dermatitis.
- Carcinogenicity: None of the ingredients in this product is listed by IARC as a carcinogen (1,2A and 2B)

3. Composition/information on ingredients

Chemical nature: mixture

<table>
<thead>
<tr>
<th>Composition</th>
<th>CAS No.</th>
<th>EC No.</th>
<th>EU registration No.</th>
<th>% By Weight</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mineral oil</td>
<td>-</td>
<td>-</td>
<td>N/A for the moment</td>
<td>&lt;10</td>
<td>Acute Tox.4(Inhalation): H332</td>
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<td>Skin Irrit. 2: H315</td>
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<td>Skin Sens. 1: H317</td>
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<td>Muta. 2: H341</td>
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<td>STOT SE 2: H371</td>
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<td>STOT RE 1: H372</td>
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<td>Aquatic Chronic 2: H411</td>
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</tbody>
</table>

*For the full text of the H-Statements mentioned in this Section, see Section 16.
4. First aid measures
4.1. Description of first aid measures
   Eyes: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Hold eyelids open during flushing. Call a physician.
   Skin: In case of contact, immediately flush with plenty of water while removing contaminated clothing and shoes. Wash contaminated clothing before reuse. If swelling or redness occurs, call a physician.
   Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.
   Ingestion: If swallowed, DO NOT induce vomiting. Seek immediate medical advice.

4.2. Most important symptoms and effects, both acute and delayed
   Eyes: Contact with eye will be irritating.
   Skin: Contact with skin may cause irritation, swelling or redness, injury, dermatitis, allergy and/or sensitization.
   Inhalation: Vapors or mist, especially as generated from heating the material or as from exposure in poorly ventilated areas or confined spaces, may cause genetic defects.
   Ingestion: May cause injury of mouth, throat, and stomach.

4.3. Indication of any immediate medical attention and special treatment needed
   No information

5. Firefighting measures
5.1. Extinguishing media
   Suitable extinguishing media:
   Use spray foam, foam, powder or CO₂ gas extinguishing media.
   Unsuitable extinguishing media:
   Water must not be used to extinguish.

5.2. Special hazards arising from the substance or mixture
   No data available

5.3. Advice for firefighters
   Wear self-contained breathing apparatus (SCBA) and full protective equipment.
   Applying direct water may be dangerous because fire may expand to surroundings.
6. Accidental release measures

General:
Notify the appropriate authorities immediately. Take all additional action necessary to prevent and remedy the adverse effects of the spill. Absorb spill with sand or earth then place in a chemical waste container.

6.1. Personal precautions, protective equipment and emergency procedures
Evacuate personnel, thoroughly ventilate area, use self-contained breathing apparatus and wear appropriate personal protective equipment.

6.2. Environmental precautions
Take care not to be drained into river and drain.

6.3. Methods and material for containment and cleaning up
Remove with a spatula or shovel, or a cloth. Wipe off remainder.

6.4. Reference to other sections
Refer to “Section 8 Exposure controls/ personal protection” and “Section 13 Disposal consideration” as appropriate.

7. Handling and storage

7.1. Precautions for safe handling
Avoid contact with flame, sparks and heated objects. Do not allow unnecessary dispersion of vapor.
Take steps to prevent static electricity, and use conductive work clothes and shoes if necessary.
Remove completely it in the safety area, if the mechanical equipment are repaired and are processed.
Wear protector, if there is possibility of skin contact or eye contact.
Avoid inhalation of vapor or mist.
Containers must be sealed.
The vapor from petroleum products builds up easily as it is heavier than air. It is therefore necessary to ensure adequate ventilation and take care with fire.
Handling should be done at room temperature. Prevent contamination of water and impurities.
Avoid contact with halogens, strong acids, alkaline substances and oxidants.

7.2. Conditions for safe storage, including any incompatibilities
Protect from sunlight. Store in a well-ventilated place.
Avoid heat, sparks, flames and any build-up of static electricity.
Avoid contact and storing with halogens, strong acids, alkaline substances and oxidants.
Don't turn the heat to an empty container.
Don't cut, weld, heat, or make the hole the container. Traces might ignite attended with the explosion.

7.3. Specific end use(s):  Lubricating Grease
8. Exposure controls/ personal protection
8.1. Control parameters

<table>
<thead>
<tr>
<th>components</th>
<th>ACGIH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mineral oil</td>
<td>TWA: 5mg/m³ (as mist)</td>
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</tbody>
</table>

8.2 Exposure controls:
Occupational Exposure controls: If the vapor arises, ventilation equipment or closing of vapor source is needed.

Personal protective equipment:
Eye protection: If necessary, wear safety glasses with side shields.

Skin protection: Wear the long sleeve work wear of the resistance to oil if handling or getting wet for a long term.

Hand protection: Wear the resistance to oil if coming in contact repeating for a long term.

Respiratory protection: If necessary, wear hazard mask.

Hygiene measures: Take off and wash the wet clothes, and use again.

Environmental exposure controls: Avoid release to the environment.

9. Physical and chemical properties
9.1. Information on basic physical and chemical properties

- **Appearance:** Light brown semisolid
- **Odor:** Slightly
- **pH:** Not applicable
- **Boiling point (deg.C):** No data available
- **Flash point (deg.C):** Over 200 deg.C (SETA)
- **Flammability:** No data available
- **Explosive properties:** Upper: 7wt%, Lower: 1wt% (Base oil)
- **Relative density:** No data available
- **Oxidizing properties:** No data available
- **Vapor pressure:** No data available
- **Solubility:** No data available
- **Solubility in water:** Insoluble
- **Partition coefficient: n-octanol/water:** No data available
- **Viscosity:** No data available
- **Melting Point:** No data available
- **Evaporation Rate:** No data available
- **Vapor Density:** No data available

9.2. Other information: No information
10. Stability and reactivity
10.1. Reactivity: No reaction with water
10.2. Chemical stability: Stability at room temperature
10.3. Possibility of hazardous reactions: Not expected
10.4. Conditions to avoid: Heating, high temperatures, and contact hazardous material
10.5. Incompatible materials: Avoid contact with acids, amines, free radical initiators, oxidizing agents.
10.6. Hazardous decomposition products: No data available.

11. Toxicological information
11.1. Information on toxicological effects
   Acute toxicity: No data available
   Serious eye damage/eye irritation: No data available
   Skin corrosion/irritation: No data available
   Respiratory or skin sensitisation: No data available
   May cause an allergic skin reaction.(Mineral oil)
   Germ cell mutagenicity: No data available
   Suspected of causing genetic defects.(Mineral oil)
   Reproductive toxicity: No data available
   Carcinogenicity: None of the ingredients in this ink is listed by IARC as a carcinogen. (1,2A and 2B)
   STOT-single exposure: No data available
   STOT-repeated exposure: No data available
   May cause damage to organs through prolonged or repeated exposure.(Mineral oil)
   Aspiration hazard: No data available

12. Ecological information
12.1. Toxicity:
   The followings are according to the data on mineral oil.
   Harmful to aquatic life.
   Harmful to aquatic life with long lasting effects.
   No data available
12.2. Persistence and degradability: No data available
12.3. Bioaccumulative potential: No data available
12.4. Mobility in soil: No data available
12.5. Results of PBT and vPvB assessment: Has not carried out PBT and vPvB assessment.
12.6. Other adverse effects: No data available

13. Disposal considerations
13.1. Waste treatment methods:
   This product is considered as a hazardous waste according to Directive 2008/98/EC.
   Treatment, storage, transportation, and disposal must be in accordance with applicable Federal, State/Provincial and Local regulations. Do not flush to surface water or sanitary sewer system.
14. Transport information
14.1. UN Class/UN Number:
   ADR/ADG/DOT, IMDG, or IATA : Not regulated
14.2. UN proper shipping name:
   ADR/ADG/DOT, IMDG, or IATA : Not regulated
14.3. Transport hazard class(es):
   ADR/ADG/DOT, IMDG, or IATA : Not regulated
14.4. Packing group:
   ADR/ADG/DOT, IMDG, or IATA : Not regulated
14.5. Environmental hazards:
   ADR/ADG/DOT, IMDG, or IATA : Not regulated
14.6. Special precautions for user:
   Transport and storage of the product in accordance with general precautions and instructions mentioned in this SDS.
14.7. Transport in bulk according to Annex II of MARPOL 73/78 and IBC code:
   Not regulated

15. Regulatory information
   US information:
      Toxic Substances Control Act (TSCA):
         All components of this product are listed on the TSCA Inventory.

      SARA Title III:
         Section 313: Not regulated

      California; Proposition 65: Not regulated

   EU information:
      Chemical Safety Assessment according to (EC)1907/2006:
         This product has not carried out any Chemical Safety Assessment yet.

   Australia Information:
      Hazardous statement: Classified as hazardous according to NOHSC criteria.

   International Information:
      None of the ingredients in this ink is listed by IARC as a carcinogen. (1,2A and 2B)

16. Other information
   List of relevant H-Statements:
      H315 Causes skin irritation.
      H317 May cause an allergic skin reaction.
      H332 Harmful if inhaled.
      H341 Suspected of causing genetic defects.
      H371 May cause damage to organs.
      H372 Causes damage to organs through prolonged or repeated exposure.
      H411 Toxic to aquatic life with long lasting effects.

The information in this Safety Data Sheet (SDS) is believed to be 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. It is subject to revision as additional knowledge and experience is gained. Roland DG does not warrant the completeness or accuracy of the information contained herein.