Safety Data Sheet

according to Regulation (EC) No 1907/2006

<table>
<thead>
<tr>
<th>651(E) Detergent Lubricating Oil (Bulk)</th>
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SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

651(E) Detergent Lubricating Oil (Bulk)

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

Use of the substance/mixture

- Petroleum base lubricant.

Uses advised against

- No information available.

1.3. Details of the supplier of the safety data sheet

- Company name: Chesterton International GmbH
- Street: Am Lenzenflecken 23
- Place: DE-85737 Ismaning GERMANY
- Telephone: +49 89 99 65 46 - 0
- Telefax: +49 89 99 65 46 - 50
- e-mail: eu-sds@chesterton.com
- e-mail (Contact person): eu-sds@chesterton.com
- Internet: www.chesterton.com
- Responsible Department: eu-sds@chesterton.com

1.4. Emergency telephone number

+49(0) 551 - 1 92 40 (GIZ-Nord, 24h)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

- Regulation (EC) No. 1272/2008
  - This mixture is not classified as hazardous in accordance with Regulation (EC) No. 1272/2008.

2.2. Label elements

- Regulation (EC) No. 1272/2008
  - Special labelling of certain mixtures
  - EUH066 - Repeated exposure may cause skin dryness or cracking.

2.3. Other hazards

- No information available.

SECTION 3: Composition/information on ingredients

3.2. Mixtures
Hazardous components

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Chemical name</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>39464-69-2</td>
<td>Oleyl alcohol, ethoxylated, phosphate</td>
<td>&lt;0.5 %</td>
</tr>
</tbody>
</table>

Classification according to Regulation (EC) No. 1272/2008 [CLP]

- Skin Irrit. 2, Eye Dam. 1, Aquatic Acute 1, Aquatic Chronic 3; H315 H318 H400 H412

Full text of H and EUH statements: see section 16.

Further Information

No information available.

SECTION 4: First aid measures

4.1. Description of first aid measures

After inhalation
Move person to fresh air. If not breathing, give artificial respiration; if by mouth to mouth use rescuer protection (pocket mask, etc). If breathing is difficult, oxygen should be administered by qualified personnel. Call a physician or transport to a medical facility.

After contact with skin
After contact with skin, wash immediately with plenty of water and soap. In case of skin irritation, consult a physician.

After contact with eyes
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

After ingestion
Do NOT induce vomiting. Immediately call a doctor.

4.2. Most important symptoms and effects, both acute and delayed
Most important symptoms and effects, both acute and delayed: Pneumonia, Pulmonary oedema.

4.3. Indication of any immediate medical attention and special treatment needed
Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media
Dry extinguishing powder. Carbon dioxide (CO2). alcohol resistant foam. Water spray jet

Unsuitable extinguishing media
High power water jet
5.2. Special hazards arising from the substance or mixture
No information available.

5.3. Advice for firefighters
Special protective equipment for firefighters
Protective clothing.
In case of fire: Wear self-contained breathing apparatus.

Additional information
Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
See protective measures under point 7 and 8.
Provide adequate ventilation.
Personal protection equipment: see section 8

6.2. Environmental precautions
Do not allow to enter into surface water or drains. Cover drains.

6.3. Methods and material for containment and cleaning up
Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

6.4. Reference to other sections
See protective measures under point 7 and 8.
Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling
Advice on safe handling
See section 8. Wear personal protection equipment (refer to section 8).

Advice on protection against fire and explosion
Keep away from sources of heat (e.g. hot surfaces), sparks and open flames.

7.2. Conditions for safe storage, including any incompatibilities
Requirements for storage rooms and vessels
Keep cool. Protect from sunlight.

Further information on storage conditions
Keep away from:
Frost
Heat
Humidity

7.3. Specific end use(s)
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No information available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.2. Exposure controls

Appropriate engineering controls
Provide adequate ventilation as well as local exhaustion at critical locations.
Take action to prevent static discharges.

Protective and hygiene measures
Wear protective gloves and protective clothing.
Use only antistatically equipped (spark-free) tools.

Eye/face protection
Suitable eye protection:
Eye glasses with side protection
goggles

Hand protection
Tested protective gloves must be worn: DIN EN 374
NBR (Nitrile rubber), Butyl caoutchouc (butyl rubber)
Thickness of the glove material >= 0,4 mm
Breakthrough times and swelling properties of the material must be taken into consideration.
For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.
Wearing time with occasional contact (splashes): max. 480 min. (NBR (Nitrile rubber))
Wearing time with permanent contact 240 - 480 min (NBR (Nitrile rubber))
Observe the wear time limits as specified by the manufacturer.

Skin protection
Wear anti-static footwear and clothing

Respiratory protection
If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn.
Filtering device (full mask or mouthpiece) with filter: A-P2

Environmental exposure controls
No special measures are necessary.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: liquid
Colour: transparent, amber
Odour: mild odour
pH-Value: not applicable
## 651(E) Detergent Lubricating Oil (Bulk)

### Changes in the physical state
- **Melting point:** not determined
- **Initial boiling point and boiling range:** not determined
- **Sublimation point:** not determined
- **Softening point:** not determined
- **Pour point:** -25 °C
- **Flash point:** 144 °C

### Flammability
- **Solid:** not determined
- **Gas:** not determined

### Explosive properties
- No information available.
- **Lower explosion limits:** not determined
- **Upper explosion limits:** not determined
- **Ignition temperature:** not determined

### Auto-ignition temperature
- **Solid:** not determined
- **Gas:** not determined

### Decomposition temperature:
- not determined

### Oxidizing properties
- No information available.
- **Vapour pressure:** not determined
- **Density:** 0.9 g/cm³
- **Water solubility:** slightly soluble

### Solubility in other solvents
- No information available.
- **Partition coefficient:** not determined
- **Viscosity / dynamic:** not determined
- **Viscosity / kinematic:** 22 mm²/s (at 40 °C)

## 9.2. Other information
- No information available.

## SECTION 10: Stability and reactivity

### 10.1. Reactivity
- The product is stable under storage at normal ambient temperatures.

### 10.2. Chemical stability
- No information available.
The substance is chemically stable under recommended conditions of storage, use and temperature.

**10.3. Possibility of hazardous reactions**

This material is considered to be non-reactive under normal use conditions.

**10.4. Conditions to avoid**

This material is combustible and can be ignited by heat, sparks, flames, or other sources of ignition (e.g. static electricity, pilot lights, or mechanical/electrical equipment).

**10.5. Incompatible materials**

- Strong acid, Strong alkali, Oxidising agent

**10.6. Hazardous decomposition products**

- Nitrogen oxides (NOx), Carbon dioxide (CO2), Carbon monoxide

### SECTION 11: Toxicological information

**11.1. Information on toxicological effects**

- **Acute toxicity**
  - Based on available data, the classification criteria are not met.

- **Irritation and corrosivity**
  - Based on available data, the classification criteria are not met.

- **Sensitising effects**
  - Based on available data, the classification criteria are not met.

- **Carcinogenic/mutagenic/toxic effects for reproduction**
  - Based on available data, the classification criteria are not met.

- **STOT-single exposure**
  - Based on available data, the classification criteria are not met.

- **STOT-repeated exposure**
  - Repeated exposure may cause skin dryness or cracking.

- **Aspiration hazard**
  - Based on available data, the classification criteria are not met.

### SECTION 12: Ecological information

**12.1. Toxicity**

No information available.

**12.2. Persistence and degradability**

No information available.

**12.3. Bioaccumulative potential**

No information available.

**12.4. Mobility in soil**

No information available.

**12.5. Results of PBT and vPvB assessment**

No information available.
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12.6. Other adverse effects
No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods
Advice on disposal
Dispose of waste according to applicable legislation.

Contaminated packaging
Dispose of waste according to applicable legislation.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number: No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name: No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es): No dangerous good in sense of this transport regulation.
14.4. Packing group: No dangerous good in sense of this transport regulation.

Inland waterways transport (ADN)

14.1. UN number: No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name: No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es): No dangerous good in sense of this transport regulation.
14.4. Packing group: No dangerous good in sense of this transport regulation.

Marine transport (IMDG)

14.1. UN number: No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name: No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es): No dangerous good in sense of this transport regulation.
14.4. Packing group: No dangerous good in sense of this transport regulation.

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number: No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name: No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es): No dangerous good in sense of this transport regulation.
14.4. Packing group: No dangerous good in sense of this transport regulation.

14.5. Environmental hazards
ENVIRONMENTALLY HAZARDOUS: no

14.6. Special precautions for user
No information available.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code
No information available.
SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

National regulatory information
  Water contaminating class (D): 1 - slightly water contaminating

15.2. Chemical safety assessment
  Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Abbreviations and acronyms
  ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
  RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
  IMDG: International Maritime Code for Dangerous Goods
  IATA: International Air Transport Association
  IATA-DGR: Dangerous Goods Refulations by the "International Air Transport Association" (IATA)
  ICAO: International Civil Aviation Organization
  ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)
  CAS: Chemical Abstracts Service (division of the American Chemical Society)
  GHS: Globally Harmonized System of Classification and Labelling of Chemicals
  CLP: Regulation on Classification, Labelling and Packaging of Substances and Mixtures,
  LC50: Lethal concentration, 50 percent
  LD50: Lethal dose, 50 percent
  EC50: Effective concentration, 50 percent
  DNEL: Derived No Effect Level
  PNEC: Predicted No Effect Concentration
  PBT: Persistent, Bioaccumulative and Toxic
  vPvB: very Persistent and very Bioaccumulative

Relevant H and EUH statements (number and full text)
  H315 Causes skin irritation.
  H318 Causes serious eye damage.
  H400 Very toxic to aquatic life.
  H412 Harmful to aquatic life with long lasting effects.
  EUH066 Repeated exposure may cause skin dryness or cracking.

Further Information
  This information is based solely on data provided by suppliers of the materials used, not on the mixture itself.
  No warranty is expressed or implied regarding the suitability of the product for the user's particular purpose.
  The user must make their own determination as to suitability.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)