



## SAFETY DATA SHEET STO-4

According to Appendix D, OSHA Hazard Communication Standard 29 CFR §1910.1200

### 1. Identification

#### Product identifier

**Product name** STO-4  
**Product number** L0860-060, L0860-062

#### Recommended use of the chemical and restrictions on use

**Application** Petroleum lubricating oil  
**Uses advised against** No specific uses advised against are identified.

#### Details of the supplier of the safety data sheet

**Manufacturer** Lubriplate Lubricants Co.  
Corporate Headquarters  
129 Lockwood Street  
Newark, NJ 07105  
  
Midwest Office & Plant  
1500 Oakdale Ave.  
Toledo, OH 43605  
419-691-2491  
419-693-3806

#### Emergency telephone number

**Emergency telephone** Chem-Tel: 1-800-255-3924 (US & Canada only)  
01-813-248-0585 (Outside US & Canada)

### 2. Hazard(s) identification

#### Classification of the substance or mixture

**Physical hazards** Not Classified  
**Health hazards** Not Classified  
**Environmental hazards** Not Classified

#### Label elements

**Hazard statements** NC Not Classified

#### Other hazards

This product does not contain any substances classified as PBT or vPvB.

### 3. Composition/information on ingredients

#### Mixtures

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|                                                               |                |
|---------------------------------------------------------------|----------------|
| <b>Distillates (petroleum), hydrotreated heavy naphthenic</b> | <b>60-100%</b> |
| CAS number: 64742-52-5                                        |                |
| <b>Classification</b>                                         |                |
| Not Classified                                                |                |

The full text for all hazard statements is displayed in Section 16.

#### 4. First-aid measures

##### Description of first aid measures

|                                   |                                                                                                                                                                                                                                                                                                        |
|-----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>General information</b>        | If in doubt, get medical attention promptly. Show this Safety Data Sheet to the medical personnel.                                                                                                                                                                                                     |
| <b>Inhalation</b>                 | No specific recommendations. If throat irritation or coughing persists, proceed as follows. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Loosen tight clothing such as collar, tie or belt. Get medical attention if any discomfort continues. |
| <b>Ingestion</b>                  | No specific recommendations. If throat irritation or coughing persists, proceed as follows. Rinse mouth. Get medical attention if any discomfort continues.                                                                                                                                            |
| <b>Skin Contact</b>               | No specific recommendations. Rinse with water. Get medical attention if any discomfort continues.                                                                                                                                                                                                      |
| <b>Eye contact</b>                | Remove any contact lenses and open eyelids wide apart. Rinse with water. Get medical attention if any discomfort continues.                                                                                                                                                                            |
| <b>Protection of first aiders</b> | Use protective equipment appropriate for surrounding materials.                                                                                                                                                                                                                                        |

##### Most important symptoms and effects, both acute and delayed

|                            |                                                                                                             |
|----------------------------|-------------------------------------------------------------------------------------------------------------|
| <b>General information</b> | The severity of the symptoms described will vary dependent on the concentration and the length of exposure. |
| <b>Inhalation</b>          | No specific symptoms known. Spray/mists may cause respiratory tract irritation.                             |
| <b>Ingestion</b>           | No specific symptoms known. May cause discomfort if swallowed.                                              |
| <b>Skin contact</b>        | No specific symptoms known. May cause discomfort.                                                           |
| <b>Eye contact</b>         | No specific symptoms known. May be slightly irritating to eyes.                                             |

##### Indication of immediate medical attention and special treatment needed

|                             |                                |
|-----------------------------|--------------------------------|
| <b>Notes for the doctor</b> | Treat symptomatically.         |
| <b>Specific treatments</b>  | No special treatment required. |

#### 5. Fire-fighting measures

##### Extinguishing media

|                                       |                                                                                                                                                                                |
|---------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Suitable extinguishing media</b>   | The product is not flammable. Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Use fire-extinguishing media suitable for the surrounding fire. |
| <b>Unsuitable extinguishing media</b> | Do not use water jet as an extinguisher, as this will spread the fire.                                                                                                         |

##### Special hazards arising from the substance or mixture

|                         |                                                                                            |
|-------------------------|--------------------------------------------------------------------------------------------|
| <b>Specific hazards</b> | Containers can burst violently or explode when heated, due to excessive pressure build-up. |
|-------------------------|--------------------------------------------------------------------------------------------|

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|                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Hazardous combustion products</b>                 | Thermal decomposition or combustion products may include the following substances:<br>Harmful gases or vapors.                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b><u>Advice for firefighters</u></b>                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Protective actions during firefighting</b>        | Avoid breathing fire gases or vapors. Evacuate area. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Cool containers exposed to flames with water until well after the fire is out. If a leak or spill has not ignited, use water spray to disperse vapors and protect men stopping the leak. Control run-off water by containing and keeping it out of sewers and watercourses. If risk of water pollution occurs, notify appropriate authorities. |
| <b>Special protective equipment for firefighters</b> | Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Standard Firefighter's clothing including helmets, protective boots and gloves will provide a basic level of protection for chemical incidents.                                                                                                                                                                                                                                                                   |

### 6. Accidental release measures

#### Personal precautions, protective equipment and emergency procedures

**Personal precautions** No specific recommendations. For personal protection, see Section 8.

#### Environmental precautions

**Environmental precautions** Avoid discharge into drains or watercourses or onto the ground.

#### Methods and material for containment and cleaning up

**Methods for cleaning up** Reuse or recycle products wherever possible. Absorb spillage to prevent material damage. Flush contaminated area with plenty of water. Wash thoroughly after dealing with a spillage. Dispose of contents/container in accordance with national regulations.

**Reference to other sections** For personal protection, see Section 8. For waste disposal, see Section 13.

### 7. Handling and storage

#### Precautions for safe handling

**Usage precautions** Read and follow manufacturer's recommendations. Wear protective clothing as described in Section 8 of this safety data sheet. Keep away from food, drink and animal feeding stuffs. Handle all packages and containers carefully to minimize spills. Keep container tightly sealed when not in use. Avoid the formation of mists.

**Advice on general occupational hygiene** Wash promptly if skin becomes contaminated. Take off contaminated clothing and wash before reuse. Wash contaminated clothing before reuse.

#### Conditions for safe storage, including any incompatibilities

**Storage precautions** Store away from incompatible materials (see Section 10). No specific recommendations.

**Storage class** Chemical storage.

#### Specific end uses(s)

**Specific end use(s)** The identified uses for this product are detailed in Section 1.

### 8. Exposure controls/Personal protection

#### Control parameters

#### Occupational exposure limits

#### **Distillates (petroleum), hydrotreated heavy naphthenic**

Mineral oil, excluding metal working fluids (pure, highly and severely refined)

ACGIH

ACGIH = American Conference of Governmental Industrial Hygienists.

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### Exposure controls

|                                         |                                                                                                                                                                                            |
|-----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Appropriate engineering controls</b> | No specific ventilation requirements.                                                                                                                                                      |
| <b>Eye/face protection</b>              | No specific eye protection required during normal use. Large Spillages: Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. |
| <b>Hand protection</b>                  | No specific hand protection recommended. Large Spillages: Wear protective gloves.                                                                                                          |
| <b>Hygiene measures</b>                 | Wash after use and before eating, smoking and using the toilet. Do not eat, drink or smoke when using this product.                                                                        |
| <b>Respiratory protection</b>           | No specific recommendations. Provide adequate ventilation. Large Spillages: If ventilation is inadequate, suitable respiratory protection must be worn.                                    |
| <b>Environmental exposure controls</b>  | Not regarded as dangerous for the environment.                                                                                                                                             |

## 9. Physical and chemical properties

### Information on basic physical and chemical properties

|                                                     |                                                                             |
|-----------------------------------------------------|-----------------------------------------------------------------------------|
| <b>Appearance</b>                                   | Liquid. [Transparent oil.]                                                  |
| <b>Color</b>                                        | Amber.                                                                      |
| <b>Odor</b>                                         | Mineral oil                                                                 |
| <b>Odor threshold</b>                               | Not available.                                                              |
| <b>pH</b>                                           | Not available.                                                              |
| <b>Melting point</b>                                | Not available.                                                              |
| <b>Initial boiling point and range</b>              | >288°C (>550.4°F)                                                           |
| <b>Flash point</b>                                  | 160°C/320°F Cleveland open cup.                                             |
| <b>Evaporation rate</b>                             | Not available.                                                              |
| <b>Flammability (solid, gas)</b>                    | Not applicable.                                                             |
| <b>Upper/lower flammability or explosive limits</b> | Lower flammable/explosive limit: 0.9 % Upper flammable/explosive limit: 7 % |
| <b>Vapor pressure</b>                               | <0.67 kPa @ 20°C                                                            |
| <b>Vapor density</b>                                | > 5                                                                         |
| <b>Relative density</b>                             | 0.91                                                                        |
| <b>Solubility(ies)</b>                              | Not available.                                                              |
| <b>Partition coefficient</b>                        | Not available.                                                              |
| <b>Auto-ignition temperature</b>                    | Not available.                                                              |
| <b>Decomposition Temperature</b>                    | Not available.                                                              |
| <b>Viscosity</b>                                    | 45 cSt @ 40°C/104°F                                                         |
| <b>Explosive properties</b>                         | Not considered to be explosive.                                             |
| <b>Oxidizing properties</b>                         | Does not meet the criteria for classification as oxidizing.                 |

## 10. Stability and reactivity

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|                                           |                                                                                                                                                                     |
|-------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Reactivity</b>                         | See the other subsections of this section for further details.                                                                                                      |
| <b>Stability</b>                          | Stable at normal ambient temperatures and when used as recommended. Stable under the prescribed storage conditions.                                                 |
| <b>Possibility of hazardous reactions</b> | No potentially hazardous reactions known.                                                                                                                           |
| <b>Conditions to avoid</b>                | Keep away from heat, sparks and open flame. Avoid heat, flames and other sources of ignition.                                                                       |
| <b>Materials to avoid</b>                 | Oxidizing agents. Chlorine.                                                                                                                                         |
| <b>Hazardous decomposition products</b>   | Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Harmful gases or vapors. |

### 11. Toxicological information

#### Information on toxicological effects

**Toxicological effects** Not regarded as a health hazard under current legislation.

#### Acute toxicity - oral

**Notes (oral LD<sub>50</sub>)** Based on available data the classification criteria are not met.

#### Acute toxicity - dermal

**Notes (dermal LD<sub>50</sub>)** Based on available data the classification criteria are not met.

#### Acute toxicity - inhalation

**Notes (inhalation LC<sub>50</sub>)** Based on available data the classification criteria are not met.

#### Skin corrosion/irritation

**Animal data** Based on available data the classification criteria are not met.

#### Serious eye damage/irritation

**Serious eye damage/irritation** Based on available data the classification criteria are not met.

#### Respiratory sensitization

**Respiratory sensitization** Based on available data the classification criteria are not met.

#### Skin sensitization

**Skin sensitization** Based on available data the classification criteria are not met.

#### Germ cell mutagenicity

**Genotoxicity - in vitro** Based on available data the classification criteria are not met.

#### Carcinogenicity

**Carcinogenicity** Based on available data the classification criteria are not met.

#### **IARC carcinogenicity**

None of the ingredients are listed or exempt.

#### Reproductive toxicity

**Reproductive toxicity - fertility** Based on available data the classification criteria are not met.

#### **Reproductive toxicity - development**

Based on available data the classification criteria are not met.

#### Specific target organ toxicity - single exposure

**STOT - single exposure** Not classified as a specific target organ toxicant after a single exposure.

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### Specific target organ toxicity - repeated exposure

**STOT - repeated exposure** Not classified as a specific target organ toxicant after repeated exposure.

### Aspiration hazard

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

**General information** No specific health hazards known. The severity of the symptoms described will vary dependent on the concentration and the length of exposure.

**Inhalation** No specific symptoms known. Spray/mists may cause respiratory tract irritation.

**Ingestion** No specific symptoms known. May cause discomfort if swallowed.

**Skin Contact** No specific symptoms known. May cause discomfort.

**Eye contact** No specific symptoms known. May be slightly irritating to eyes.

**Route of exposure** Ingestion Inhalation Skin and/or eye contact

**Target Organs** No specific target organs known.

### Toxicological information on ingredients.

#### reaction mass of: triphenylthiophosphate and tertiary butylated phenyl derivatives

#### Acute toxicity - oral

**Notes (oral LD<sub>50</sub>)** Based on available data the classification criteria are not met.

#### Acute toxicity - dermal

**Notes (dermal LD<sub>50</sub>)** Based on available data the classification criteria are not met.

#### Acute toxicity - inhalation

**Notes (inhalation LC<sub>50</sub>)** Based on available data the classification criteria are not met.

#### Skin corrosion/irritation

**Animal data** Based on available data the classification criteria are not met.

#### Serious eye damage/irritation

**Serious eye damage/irritation** Based on available data the classification criteria are not met.

#### Respiratory sensitization

**Respiratory sensitization** Based on available data the classification criteria are not met.

#### Skin sensitization

**Skin sensitization** Based on available data the classification criteria are not met.

#### Germ cell mutagenicity

**Genotoxicity - in vitro** Based on available data the classification criteria are not met.

#### Carcinogenicity

**Carcinogenicity** Based on available data the classification criteria are not met.

**IARC carcinogenicity** None of the ingredients are listed or exempt.

#### Reproductive toxicity

**Reproductive toxicity - fertility** Based on available data the classification criteria are not met.

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**Reproductive toxicity - development** Suspected of damaging the unborn child.

**Specific target organ toxicity - single exposure**

**STOT - single exposure** Not classified as a specific target organ toxicant after a single exposure.

**Specific target organ toxicity - repeated exposure**

**STOT - repeated exposure** Not classified as a specific target organ toxicant after repeated exposure.

**Aspiration hazard**

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

**General information** Avoid contact during pregnancy/while nursing. May damage fertility. The severity of the symptoms described will vary dependent on the concentration and the length of exposure.

**Inhalation** No specific symptoms known.

**Ingestion** No specific symptoms known.

**Skin Contact** No specific symptoms known.

**Eye contact** No specific symptoms known.

**Route of exposure** Ingestion Inhalation Skin and/or eye contact

**Target Organs** No specific target organs known.

### 12. Ecological information

**Ecotoxicity** Not regarded as dangerous for the environment. However, large or frequent spills may have hazardous effects on the environment.

**Toxicity** Based on available data the classification criteria are not met.

**Persistence and degradability**

**Persistence and degradability** The degradability of the product is not known.

**Bioaccumulative potential**

**Bio-Accumulative Potential** No data available on bioaccumulation.

**Partition coefficient** Not available.

**Mobility in soil**

**Mobility** No data available.

**Other adverse effects**

**Other adverse effects** None known.

### 13. Disposal considerations

**Waste treatment methods**

**General information** The generation of waste should be minimized or avoided wherever possible. Reuse or recycle products wherever possible. This material and its container must be disposed of in a safe way.

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|                         |                                                                                                                                                                                                                                                                                                                                                                                          |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Disposal methods</b> | Dispose of surplus products and those that cannot be recycled via a licensed waste disposal contractor. Waste packaging should be collected for reuse or recycling. Incineration or landfill should only be considered when recycling is not feasible. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of the local water authority. |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

### 14. Transport information

|                |                                                                                                                |
|----------------|----------------------------------------------------------------------------------------------------------------|
| <b>General</b> | The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, DOT). |
|----------------|----------------------------------------------------------------------------------------------------------------|

#### UN Number

|                               |                 |
|-------------------------------|-----------------|
| <b>UN No. (International)</b> | Not applicable. |
|-------------------------------|-----------------|

|                     |                 |
|---------------------|-----------------|
| <b>UN No. (DOT)</b> | Not applicable. |
|---------------------|-----------------|

#### UN proper shipping name

|                                             |                 |
|---------------------------------------------|-----------------|
| <b>Proper shipping name (International)</b> | Not applicable. |
|---------------------------------------------|-----------------|

|                                   |                 |
|-----------------------------------|-----------------|
| <b>Proper shipping name (DOT)</b> | Not applicable. |
|-----------------------------------|-----------------|

#### Transport hazard class(es)

|                                         |                                     |
|-----------------------------------------|-------------------------------------|
| <b>Transport Labels (International)</b> | No transport warning sign required. |
|-----------------------------------------|-------------------------------------|

#### **DOT transport labels**

No transport warning sign required.

#### Packing group

|                                      |                 |
|--------------------------------------|-----------------|
| <b>Packing group (International)</b> | Not applicable. |
|--------------------------------------|-----------------|

|                          |                 |
|--------------------------|-----------------|
| <b>DOT packing group</b> | Not applicable. |
|--------------------------|-----------------|

#### Environmental hazards

##### **Environmentally Hazardous Substance**

No.

#### Special precautions for user

Not applicable.

|                                |                 |
|--------------------------------|-----------------|
| <b>DOT reportable quantity</b> | Not applicable. |
|--------------------------------|-----------------|

|                     |                 |
|---------------------|-----------------|
| <b>DOT TIH Zone</b> | Not applicable. |
|---------------------|-----------------|

|                                                                                 |                 |
|---------------------------------------------------------------------------------|-----------------|
| <b>Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b> | Not applicable. |
|---------------------------------------------------------------------------------|-----------------|

### 15. Regulatory information

#### US Federal Regulations

##### **SARA Section 302 Extremely Hazardous Substances Tier II Threshold Planning Quantities**

None of the ingredients are listed or exempt.

##### **CERCLA/Superfund, Hazardous Substances/Reportable Quantities (EPA)**

None of the ingredients are listed or exempt.

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### **SARA Extremely Hazardous Substances EPCRA Reportable Quantities**

None of the ingredients are listed or exempt.

### **SARA 313 Emission Reporting**

None of the ingredients are listed or exempt.

### **CAA Accidental Release Prevention**

None of the ingredients are listed or exempt.

### **FDA - Essential Chemical**

None of the ingredients are listed or exempt.

### **FDA - Precursor Chemical**

None of the ingredients are listed or exempt.

### **SARA (311/312) Hazard Categories**

None of the ingredients are listed or exempt.

### **OSHA Highly Hazardous Chemicals**

None of the ingredients are listed or exempt.

### **US State Regulations**

#### **California Proposition 65 Carcinogens and Reproductive Toxins**

None of the ingredients are listed or exempt.

#### **California Air Toxics "Hot Spots" (A-I)**

None of the ingredients are listed or exempt.

#### **California Air Toxics "Hot Spots" (A-II)**

None of the ingredients are listed or exempt.

#### **California Directors List of Hazardous Substances**

None of the ingredients are listed or exempt.

#### **Massachusetts "Right To Know" List**

The following ingredients are listed or exempt:

*Distillates (petroleum), hydrotreated light naphthenic*

#### **Rhode Island "Right To Know" List**

The following ingredients are listed or exempt:

*1,2-Propylene glycol*

#### **Minnesota "Right To Know" List**

The following ingredients are listed or exempt:

*1,2-Propylene glycol*

#### **New Jersey "Right To Know" List**

The following ingredients are listed or exempt:

*1,2-Propylene glycol*

#### **Pennsylvania "Right To Know" List**

The following ingredients are listed or exempt:

*1,2-Propylene glycol*

### **Inventories**

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### US - TSCA

All the ingredients are listed or exempt.

### US - TSCA 12(b) Export Notification

None of the ingredients are listed or exempt.

### 16. Other information

|                                  |                                                  |
|----------------------------------|--------------------------------------------------|
| <b>Training advice</b>           | Only trained personnel should use this material. |
| <b>Revision date</b>             | 8/29/2018                                        |
| <b>SDS No.</b>                   | 5133                                             |
| <b>Hazard statements in full</b> | H361d Suspected of damaging the unborn child.    |
| <b>End of SDS</b>                |                                                  |

This 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. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.