SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Identification
Product form: Mixture
Product name: Lucas Semi-Synthetic SAE 10W-40 Racing Motor Oil
Other means of identification: Part number: 10943, 10913, 10914, 10951

1.2. Relevant identified uses of the substance or mixture and uses advised against
Use of the substance/mixture: Lubricant

1.3. Details of the supplier of the safety data sheet
Lucas Oil Products, Inc
302 North Sheridan Street
Corona, California 92880-2067 - USA
T (951) 270-0154 - F (951) 270-1902
GHewgill@lucasoil.com - www.LucasOil.com

1.4. Emergency telephone number
Emergency number: (951) 493-1149 (951) 847-5949 7:00A.M. to 5:00P.M. Monday thru Friday

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture
GHS-US classification
Eye Irrit. 2A H319 - Causes serious eye irritation
Full text of H-statements: see section 16

2.2. Label elements
GHS-US labelling
Hazard pictograms (GHS-US):

GHS07

Signal word (GHS-US): Warning
Hazard statements (GHS-US): H319 - Causes serious eye irritation
Precautionary statements (GHS-US): P264 - Wash hands thoroughly after handling
P280 - Wear eye protection, protective gloves
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P337+P313 - If eye irritation persists: Get medical advice/attention

2.3. Other hazards
No additional information available

2.4. Unknown acute toxicity (GHS US)
22.25 percent of the mixture consists of ingredient(s) of unknown acute toxicity (Oral)
22.25 percent of the mixture consists of ingredient(s) of unknown acute toxicity (Dermal)
22.25 percent of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Dust/Mist))

SECTION 3: Composition/information on ingredients

3.1. Substance
Not applicable
3.2. Mixture

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>GHS-US classification</th>
</tr>
</thead>
</table>
| Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts | (CAS No) 84605-29-8     | 0.45 - 1.5 | Skin Irrit. 2, H315  
  Eye Dam. 1, H318  
  Aquatic Chronic 2, H411 |
| 2,6-Di-tert-butyl-4-methylphenol                                     | (CAS No) 128-37-0       | 0.01 - 0.1 | STOT RE 2, H373  
  Aquatic Acute 1, H400 |

*Chemical name, CAS number and/or exact concentration have been withheld as a trade secret

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general: Never give anything by mouth to an unconscious person.

First-aid measures after inhalation: If inhaled and if breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

First-aid measures after skin contact: Wash skin with plenty of water.

First-aid measures after eye contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.

First-aid measures after ingestion: If swallowed, rinse mouth with water (only if the person is conscious). Do NOT induce vomiting unless directed to do so by medical personnel.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries after eye contact: Causes serious eye irritation.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media


Unsuitable extinguishing media: Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard: No particular fire or explosion hazard. Burning produces irritating, toxic and noxious fumes.

Reactivity: No dangerous reactions known.

5.3. Advice for firefighters

Firefighting instructions: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Do not allow run-off from fire fighting to enter drains or water courses.

Protection during firefighting: Do not enter fire area without proper protective equipment, including respiratory protection. Use self-contained breathing apparatus. Wear fire/flame resistant/retardant clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures: Danger of slipping on leaked or spilled product. Avoid all eye and skin contact and do not breathe vapour and mist.

6.1.1. For non-emergency personnel

Protective equipment: Chemical goggles or safety glasses. Wear suitable gloves.

Emergency procedures: Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment: Chemical goggles or safety glasses. Wear suitable gloves.

Emergency procedures: Stop leak if safe to do so. Ventilate area.

6.2. Environmental precautions

Avoid release to the environment. Prevent entry to sewers and public waters.

6.3. Methods and material for containment and cleaning up

For containment: Do not allow minor leaks or spills to accumulate on walking surfaces. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

Methods for cleaning up: Absorb and/or contain spill with inert material, then place in suitable container. Collect spillage.

Other information: Dispose of materials or solid residues at an authorized site.
6.4. Reference to other sections
Section 13: disposal information. Section 7: safe handling. Section 8: personal protective equipment.

SECTION 7: Handling and storage

7.1. Precautions for safe handling
Precautions for safe handling: Ensure good ventilation of the work station. Wear proper protective equipment. Avoid all eye and skin contact and do not breathe vapour and mist.

Hygiene measures: Do not eat, drink or smoke when using this product. Always wash your hands immediately after handling this product, and once again before leaving the workplace.

7.2. Conditions for safe storage, including any incompatibilities
Storage conditions: Keep only in the original container. Keep container closed when not in use.
Incompatible products: strong oxidizers.
Prohibitions on mixed storage: Incompatible materials.
Storage area: Store in dry, cool, well-ventilated area.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

<table>
<thead>
<tr>
<th>Lucas Semi-Synthetic SAE 10W-40 Racing Motor Oil</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACGIH</td>
</tr>
<tr>
<td>OSHA</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2,6-Di-tert-butyl-4-methylphenol (128-37-0)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACGIH</td>
</tr>
<tr>
<td>ACGIH</td>
</tr>
<tr>
<td>OSHA</td>
</tr>
<tr>
<td>DNEL</td>
</tr>
<tr>
<td>PNEC</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts (84605-29-8)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACGIH</td>
</tr>
<tr>
<td>OSHA</td>
</tr>
</tbody>
</table>

8.2. Exposure controls
Appropriate engineering controls: Avoid splashing. Ensure good ventilation of the work station.
Personal protective equipment: Avoid all unnecessary exposure.
Hand protection: Wear suitable gloves. nitrile rubber gloves.
Eye protection: Chemical goggles or safety glasses.
Respiratory protection: No special respiratory protection equipment is recommended under normal conditions of use with adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Use an approved respirator equipped with oil/mist cartridges.

Environmental exposure controls: Prevent leakage or spillage.
Consumer exposure controls: Keep out of reach of children.
Other information: Do not eat, drink or smoke when using this product.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| Physical state | Liquid |
| Colour | amber |
| Odour | petroleum |
| Odour threshold | No data available |
| pH | No data available |
| Melting point | No data available |
| Freezing point | No data available |
| Boiling point | No data available |
Flash point : No data available
Relative evaporation rate (butyl acetate=1) : No data available
Flammability (solid, gas) : No data available
Explosive limits : No data available
Explosive properties : No data available
Oxidising properties : No data available
Vapour pressure : No data available
Relative density : No data available
Relative vapour density at 20 °C : No data available
Density : 0.888 g/ml
Solubility : Water: Solubility in water of component(s) of the mixture :
  2,6-Di-tert-butyl-4-methylphenol: 0.6 mg/l
Log Pow : No data available
Auto-ignition temperature : No data available
Decomposition temperature : No data available
Viscosity : No data available
Viscosity, kinematic : 84 cSt @ 40 °C
Viscosity, dynamic : No data available

9.2. Other information
No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity
No dangerous reactions known.

10.2. Chemical stability
Stable under normal conditions.

10.3. Possibility of hazardous reactions
Hazardous polymerization will not occur.

10.4. Conditions to avoid
Extremely high or low temperatures.

10.5. Incompatible materials
Strong oxidizers.

10.6. Hazardous decomposition products
Carbon oxides (CO, CO2). Burning produces irritating, toxic and noxious fumes.

SECTION 11: Toxicological information

11.1. Information on toxicological effects
Likely routes of exposure : Inhalation; Skin and eye contact
Acute toxicity : Not classified

2,6-Di-tert-butyl-4-methylphenol (128-37-0)

LD50 oral rat : 6000 mg/kg
LD50 dermal rabbit : > 2000 mg/kg
ATE US (oral) : 6000.000 mg/kg bodyweight

Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts (84605-29-8)

LD50 oral rat : 3100 mg/kg
LD50 dermal rat : > 2002 mg/kg
LC50 inhalation rat (mg/l) : > 2.3 mg/l/4h
ATE US (oral) : 3100.000 mg/kg bodyweight

Skin corrosion/irritation : Not classified
Serious eye damage/irritation : Causes serious eye irritation.
Respiratory or skin sensitisation : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
### Reproductive toxicity
- Not classified

### Specific target organ toxicity (single exposure)
- Not classified

### Specific target organ toxicity (repeated exposure)
- Not classified

### 2,6-Di-tert-butyl-4-methylphenol (128-37-0)

| NOAEL (oral, rat, 90 days) | 25 mg/kg bodyweight/day Digestive, live, urogenital, kidneys, glandular, thyroids, adrenal gland. |

### Aspiration hazard
- Not classified

### Symptoms/injuries after eye contact
- Causes serious eye irritation.

## SECTION 12: Ecological information

### 12.1. Toxicity

**Ecology - water:** Harmful to aquatic life with long lasting effects.

<table>
<thead>
<tr>
<th>Substance</th>
<th>LC50 fish</th>
<th>EC50 Daphnia</th>
<th>EC50 other aquatic organisms</th>
<th>NOEC (acute)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,6-Di-tert-butyl-4-methylphenol</td>
<td>0.199</td>
<td>0.48 mg/l</td>
<td>0.758 mg/l</td>
<td>0.15 mg/l</td>
</tr>
<tr>
<td>Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts</td>
<td>4.5 mg/l</td>
<td>23 mg/l</td>
<td>21 mg/l</td>
<td>1.8 mg/l</td>
</tr>
</tbody>
</table>

### 12.2. Persistence and degradability

**Lucas Semi-Synthetic SAE 10W-40 Racing Motor Oil**
- May cause long-term adverse effects in the environment.

<table>
<thead>
<tr>
<th>Substance</th>
<th>Persistence and degradability</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,6-Di-tert-butyl-4-methylphenol</td>
<td>Not readily biodegradable. May cause long-term adverse effects in the environment.</td>
</tr>
<tr>
<td>Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts</td>
<td>1.5 % 28 days</td>
</tr>
</tbody>
</table>

### 12.3. Bioaccumulative potential

<table>
<thead>
<tr>
<th>Substance</th>
<th>Log Pow</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,6-Di-tert-butyl-4-methylphenol</td>
<td>5.2</td>
</tr>
<tr>
<td>Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts</td>
<td>0.56</td>
</tr>
</tbody>
</table>

**This product is not bioaccumulating.**

### 12.4. Mobility in soil

<table>
<thead>
<tr>
<th>Substance</th>
<th>Mobility in soil</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,6-Di-tert-butyl-4-methylphenol</td>
<td>Absorbs to soil particles and will not be mobile.</td>
</tr>
</tbody>
</table>

### 12.5. Other adverse effects

**Other adverse effects:** Avoid release to the environment.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

<table>
<thead>
<tr>
<th>Waste treatment methods</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sewage disposal recommendations</td>
<td>Do not dispose of waste into sewer.</td>
</tr>
<tr>
<td>Waste disposal recommendations</td>
<td>Dispose in a safe manner in accordance with local/national regulations.</td>
</tr>
<tr>
<td>Ecology - waste materials</td>
<td>Avoid release to the environment.</td>
</tr>
</tbody>
</table>
SECTION 14: Transport information

Department of Transportation (DOT)
In accordance with DOT
Not considered a dangerous good for transport regulations

TDG
No additional information available

Transport by sea
No additional information available

Air transport
No additional information available

SECTION 15: Regulatory information

15.1. US Federal regulations

2,6-Di-tert-butyl-4-methylphenol (128-37-0)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. International regulations

CANADA

2,6-Di-tert-butyl-4-methylphenol (128-37-0)
Listed on the Canadian DSL (Domestic Substances List) inventory.

EU-Regulations

2,6-Di-tert-butyl-4-methylphenol (128-37-0)
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

Classification according to Regulation (EC) No. 1272/2008 [CLP]
Eye Irrit. 2 H319
Aquatic Chronic 3 H412
Full text of classification categories and H statements : see section 16

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]
No additional information available

National regulations

2,6-Di-tert-butyl-4-methylphenol (128-37-0)
Listed on IECS (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on AICS (Australian Inventory of Chemical Substances)
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
Listed on the Korean ECL (Existing Chemicals List)
Listed on Taiwan National Chemical Inventory
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

15.3. US State regulations
No additional information available

SECTION 16: Other information

Indication of changes : Original Document.
Lucas Semi-Synthetic SAE 10W-40 Racing Motor Oil

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Data sources: Component Supplier SDSs.


European Chemicals Agency (ECHA) Registered Substances list.


Internal Company test data.


Abbreviations and acronyms:

ATE: Acute Toxicity Estimate.

CAS (Chemical Abstracts Service) number.

CLP: Classification, Labelling, Packaging.

EC50: Environmental Concentration associated with a response by 50% of the test population.

GHS: Globally Harmonized System (of Classification and Labeling of Chemicals).

LD50: Lethal Dose for 50% of the test population.

STEL: Short Term Exposure Limits.

WEL: Workplace Exposure Limit.


Full text of H-statements:

| Aquatic Acute 1 | Hazardous to the aquatic environment — Acute Hazard, Category 1 |
| Aquatic Chronic 2 | Hazardous to the aquatic environment — Chronic Hazard, Category 2 |
| Eye Irrit. 2A | Serious eye damage/eye irritation, Category 2A |
| Skin Irrit. 2 | Skin corrosion/irritation, Category 2 |
| STOT RE 2 | Specific target organ toxicity — Repeated exposure, Category 2 |
| H315 | Causes skin irritation |
| H319 | Causes serious eye irritation |
| H373 | May cause damage to organs through prolonged or repeated exposure |
| H400 | Very toxic to aquatic life |
| H411 | Toxic to aquatic life with long lasting effects |

NFPA health hazard: 1 - Exposure could cause irritation but only minor residual injury even if no treatment is given.

NFPA fire hazard: 1 - Must be preheated before ignition can occur.

NFPA reactivity: 0 - Normally stable, even under fire exposure conditions, and not reactive with water.

Redstone SDS US GHS for Lucas Oil

SDS Prepared by: The Redstone Group, LLC.
6077 Frantz Rd.
Suite 206
Dublin, Ohio, USA 43016
614.923.7472
www.redstonegrp.com

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.