I. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

<table>
<thead>
<tr>
<th>Ashland</th>
<th>Regulatory Information Number</th>
<th>1-800-325-3751</th>
</tr>
</thead>
<tbody>
<tr>
<td>P.O. Box 2219</td>
<td>Telephone</td>
<td>614-790-3333</td>
</tr>
<tr>
<td>Columbus, OH 43216</td>
<td>Emergency telephone number</td>
<td>1-800-ASHLAND (1-800-274-5263)</td>
</tr>
</tbody>
</table>

Product name: NEXTGEN SYNTHETIC 5W-20 MOTOR OIL

Product code: 798012

2. HAZARDS IDENTIFICATION

Emergency Overview

Appearance: liquid

CAUTION! PROLONGED OR REPEATED CONTACT MAY DRY THE SKIN AND CAUSE IRRITATION AND BURNS.

Potential Health Effects

Exposure routes

Inhalation, Skin absorption, Skin contact, Eye Contact, Ingestion

Eye contact

May cause mild eye irritation. Symptoms include stinging, tearing, and redness.

Skin contact

May cause slight skin irritation. Prolonged or repeated contact may dry the skin. Symptoms may include redness, burning, and drying and cracking of skin, skin burns, and other skin damage.

Ingestion

Swallowing small amounts of this material during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful.

Inhalation
It is possible to breathe this material under certain conditions of handling and use (for example, during heating, spraying, or stirring). Breathing small amounts of this material during normal handling is not likely to cause harmful effects. Breathing large amounts may be harmful. Symptoms are not expected at air concentrations below the recommended exposure limits, if applicable (see Section 8.).

**Aggravated Medical Condition**
Preexisting disorders of the following organs (or organ systems) may be aggravated by exposure to this material: Skin, lung (for example, asthma-like conditions)

**Symptoms**
Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: acne, stomach or intestinal upset (nausea, vomiting, diarrhea), irritation (nose, throat, airways)

**Target Organs**
Overexposure to this material (or its components) has been suggested as a cause of the following effects in laboratory animals: thyroid effects, mild, reversible liver effects

**Carcinogenicity**
Used motor oil has been shown to cause skin cancer in laboratory animals continually exposed by repeated applications. Avoid prolonged or repeated skin contact. This material is not listed as a carcinogen by the International Agency for Research on Cancer (IARC), the National Toxicology Program (NTP), or the Occupational Safety and Health Administration (OSHA).

**Reproductive hazard**
There are no data available for assessing risk to the fetus from maternal exposure to this material.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Hazardous Components</th>
<th>CAS-No. / Trade Secret No.</th>
<th>Concentration</th>
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</thead>
<tbody>
<tr>
<td>LUBRICATING OILS, PETROLEUM, HYDROTREATED SPENT</td>
<td>64742-58-1</td>
<td>&gt;=50-&lt;60%</td>
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<tr>
<td>HYDROTREATED HEAVY PARAFFINIC BASE OIL</td>
<td>64742-54-7</td>
<td>&gt;=10-&lt;15%</td>
</tr>
<tr>
<td>HEAVY PARAFFINIC DISTILLATE</td>
<td>64742-54-7</td>
<td>&gt;=1.5-&lt;5%</td>
</tr>
</tbody>
</table>
4. FIRST AID MEASURES

**Eyes**
If symptoms develop, move individual away from exposure and into fresh air. Flush eyes gently with water while holding eyelids apart. If symptoms persist or there is any visual difficulty, seek medical attention.

**Skin**
Remove contaminated clothing. Wash exposed area with soap and water. If symptoms persist, seek medical attention. Launder clothing before reuse.

**Ingestion**
Seek medical attention. If individual is drowsy or unconscious, do not give anything by mouth; place individual on the left side with the head down. Contact a physician, medical facility, or poison control center for advice about whether to induce vomiting. If possible, do not leave individual unattended.

**Inhalation**
If symptoms develop, move individual away from exposure and into fresh air. If symptoms persist, seek medical attention. If breathing is difficult, administer oxygen. Keep person warm and quiet; seek immediate medical attention.

**Notes to physician**
**Hazard:** Acute aspiration of large amounts of oil-laden material may produce a serious aspiration pneumonia. Patients who aspirate these oils should be followed for the development of long-term sequelae. Repeated aspiration of small quantities of mineral oil can produce chronic inflammation of the lungs (i.e., lipid pneumonia) that may progress to pulmonary fibrosis. Symptoms are often subtle and radiological changes appear worse than clinical abnormalities. Occasionally, persistent cough, irritation of the upper respiratory tract, shortness of breath with exertion, fever, and bloody sputum occur. Inhalation exposure to oil mists below current workplace exposure limits is unlikely to cause pulmonary abnormalities.

**Treatment:** No information available.

5. FIREFIGHTING MEASURES

**Suitable extinguishing media**
Dry chemical, Carbon dioxide (CO2), Water spray

**Hazardous combustion products**
Precautions for fire-fighting

Wear full firefighting turn-out gear (full Bunker gear), and respiratory protection (SCBA). DO NOT direct a solid stream of water or foam into hot, burning pools of liquid since this may cause frothing and increase fire intensity. Frothing can be violent and possibly endanger any firefighter standing too close to the burning liquid. Use water spray to cool fire exposed containers and structures until fire is out if it can be done with minimal risk. Avoid spreading burning material with water used for cooling purposes.

NFPA Flammable and Combustible Liquids Classification

Combustible Liquid Class IIIB

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

For personal protection see section 8. Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed.

Environmental precautions

Prevent spreading over a wide area (e.g. by containment or oil barriers). Do not let product enter drains. Do not flush into surface water or sanitary sewer system.

Methods for cleaning up

Keep in suitable, closed containers for disposal. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).

Other information

Comply with all applicable federal, state, and local regulations.

7. HANDLING AND STORAGE

Handling

Containers of this material may be hazardous when emptied. Since emptied containers retain product residues (vapor, liquid, and/or solid), all hazard precautions given in the data sheet must be observed.
8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines
Contains no substances with occupational exposure limit values.

General advice
These recommendations provide general guidance for handling this product. Personal protective equipment should be selected for individual applications and should consider factors which affect exposure potential, such as handling practices, chemical concentrations and ventilation. It is ultimately the responsibility of the employer to follow regulatory guidelines established by local authorities.

Exposure controls
Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below exposure guidelines (if applicable) or below levels that cause known, suspected or apparent adverse effects.

Eye protection
Not required under normal conditions of use. Wear splash-proof safety goggles if material could be misted or splashed into eyes.

Skin and body protection
Wear normal work clothing including long pants, long-sleeved shirts and foot covering to prevent direct contact of the product with the skin. Launder clothing before reuse. If skin irritation develops, contact your facility health and safety professional or your local safety equipment supplier to determine the proper personal protective equipment for your use. Wear resistant gloves (consult your safety equipment supplier).

Respiratory protection
A NIOSH-approved air-purifying respirator with an appropriate cartridge and/or filter may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits (if applicable) or if overexposure has otherwise been determined. Protection provided by air-purifying respirators is limited. Use a positive pressure, air-supplied respirator if there is any potential for uncontrolled release, exposure levels are not known or any other circumstances where an air-purifying respirator may not provide adequate protection.

9. PHYSICAL AND CHEMICAL PROPERTIES
10. STABILITY AND REACTIVITY

**Stability**
Stable.

**Conditions to avoid**
None known.

**Incompatible products**
Acids, halogenated hydrocarbons, halogens, Strong oxidizing agents

**Hazardous decomposition products**
Aldehydes, carbon dioxide and carbon monoxide, Hydrocarbons

**Hazardous reactions**
Product will not undergo hazardous polymerization.

11. TOXICOLOGICAL INFORMATION

**Acute oral toxicity**

<table>
<thead>
<tr>
<th>Acute oral toxicity - Product</th>
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**Acute oral toxicity - Components**

<table>
<thead>
<tr>
<th>Component</th>
<th>LD 50: &gt; 15 g/kg Species: Rat</th>
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<tbody>
<tr>
<td>HYDROTREATED</td>
<td></td>
</tr>
<tr>
<td>HEAVY PARAFFINIC BASE OIL</td>
<td></td>
</tr>
<tr>
<td>HEAVY PARAFFINIC DISTILLATE</td>
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### Acute Inhalation Toxicity

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<th>Acute inhalation toxicity</th>
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### Acute Dermal Toxicity

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<tbody>
<tr>
<td>Product</td>
<td></td>
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</table>

#### Acute Dermal Toxicity - Components

<table>
<thead>
<tr>
<th>HYDROTREATED HEAVY PARAFFINIC BASE OIL</th>
<th>LD 50: &gt; 5 g/kg Species: Rabbit</th>
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</thead>
<tbody>
<tr>
<td>HEAVY PARAFFINIC DISTILLATE</td>
<td>LD 50: &gt; 5 g/kg Species: Rabbit</td>
</tr>
</tbody>
</table>

### Acute Toxicity (Other Routes of Administration)

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<thead>
<tr>
<th>Acute toxicity (other routes of administration)</th>
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### 12. Ecological Information

#### Biodegradability

<table>
<thead>
<tr>
<th>Biodegradability - Product</th>
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#### Bioaccumulation

<table>
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<tr>
<th>Bioaccumulation - Product</th>
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#### Ecotoxicity Effects

##### Toxicity to Fish

<table>
<thead>
<tr>
<th>Toxicity to fish - Product</th>
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</table>

##### Toxicity to Daphnia and Other Aquatic Invertebrates

<table>
<thead>
<tr>
<th>Toxicity to daphnia and</th>
<th>: no data available</th>
</tr>
</thead>
</table>
other aquatic invertebrates
- Product

**Toxicity to algae**

| Toxicity to algae - Product | : no data available |

**Toxicity to bacteria**

| Toxicity to bacteria - Product | : no data available |

### 13. DISPOSAL CONSIDERATIONS

**Waste disposal methods**

Dispose of in accordance with all applicable local, state and federal regulations.

### 14. TRANSPORT INFORMATION

#### REGULATION

<table>
<thead>
<tr>
<th>ID NUMBER</th>
<th>PROPER SHIPPING NAME</th>
<th>*HAZARD CLASS</th>
<th>SUBSIDIARY HAZARDS</th>
<th>PACKING GROUP</th>
<th>MARINE POLLUTANT / LTD. QTY.</th>
</tr>
</thead>
</table>

**U.S. DOT - ROAD**

Not dangerous goods

**U.S. DOT - RAIL**

Not dangerous goods

**U.S. DOT - INLAND WATERWAYS**

Not dangerous goods

**TRANSPORT CANADA - ROAD**

Not dangerous goods
TRANSPORT CANADA - RAIL
Not dangerous goods

TRANSPORT CANADA - INLAND WATERWAYS
Not dangerous goods

INTERNATIONAL MARITIME DANGEROUS GOODS
Not dangerous goods

INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO
Not dangerous goods

INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER
Not dangerous goods

MEXICAN REGULATION FOR THE LAND TRANSPORT OF HAZARDOUS MATERIALS AND WASTES
Not dangerous goods

*ORM = ORM-D, CBL = COMBUSTIBLE LIQUID

Dangerous goods descriptions (if indicated above) may not reflect quantity, end-use or region-specific exceptions that can be applied. Consult shipping documents for descriptions that are specific to the shipment.

15. REGULATORY INFORMATION

California Prop. 65
Proposition 65 warnings are not required for this product based on the results of a risk assessment.

SARA Hazard Classification
SARA 311/312 Classification
No SARA Hazards

SARA 313 Component(s)
SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

New Jersey RTK Label Information
SAFETY DATA SHEET

NEXTGEN SYNTHETIC 5W-20 MOTOR OIL
798012

LUBRICATING OILS, PETROLEUM, HYDROTREATED SPENT
ALPHA OLEFIN OLIGOMERS, HYDROGENATED
HYDROTREATED HEAVY PARAFFINIC BASE OIL
HEAVY PARAFFINIC DISTILLATE
LUBRICANT ADDITIVE

64742-58-1
64742-54-7
64742-54-7
64742-54-7

Pennsylvania RTK Label Information

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<tr>
<td>LUBRICATING OILS, PETROLEUM, HYDROTREATED SPENT</td>
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<tr>
<td>ALPHA OLEFIN OLIGOMERS, HYDROGENATED</td>
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<tr>
<td>HYDROTREATED HEAVY PARAFFINIC BASE OIL</td>
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<tr>
<td>HEAVY PARAFFINIC DISTILLATE</td>
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</table>

Notification status

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<tr>
<th>Country</th>
<th>Act</th>
<th>Listing</th>
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</thead>
<tbody>
<tr>
<td>US</td>
<td>Toxic Substances Control Act</td>
<td>y (positive listing)</td>
</tr>
<tr>
<td>Australia</td>
<td>Industrial Chemical (Notification and Assessment) Act</td>
<td>y (positive listing)</td>
</tr>
<tr>
<td>New Zealand</td>
<td>Inventory of Chemicals (NZIoC), as published by ERMA New Zealand</td>
<td>n (Negative listing)</td>
</tr>
<tr>
<td>Japan</td>
<td>Kashin-Hou Law List</td>
<td>n (Negative listing)</td>
</tr>
<tr>
<td>Korea</td>
<td>Toxic Chemical Control Law (TCCL) List</td>
<td>y (positive listing)</td>
</tr>
<tr>
<td>Philippines</td>
<td>The Toxic Substances and Hazardous and Nuclear Waste Control Act</td>
<td>y (positive listing)</td>
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<tr>
<td>China</td>
<td>Inventory of Existing Chemical Substances</td>
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</table>

<table>
<thead>
<tr>
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<th>NFPA</th>
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<tr>
<td>Specific Hazard</td>
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</tr>
</tbody>
</table>

Page 10 / 11
16. OTHER INFORMATION

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances. This MSDS has been prepared by Ashland's Environmental Health and Safety Department (1-800-325-3751).