

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations



Version: PCMOS.001

## SECTION 1: IDENTIFICATION

1.1. Product Identifier

Product Form: Mixture

Product Name: DuraMAX Synthetic Motor Oil

Product Grades: 0W-40 Synonyms: Engine Oil

1.2. Intended Use of the Product

Engine Oil.

1.3. Name, Address, and Telephone of the Responsible Party

**Company** 

RelaDyne, LLC

8280 Montgomery Road, Suite 101

Cincinnati, OH 45236

888-830-3156 www.reladyne.com

1.4. Emergency Telephone Number

Emergency Number: INFOTRAC 800-535-5053

## **SECTION 2: HAZARDS IDENTIFICATION**

#### 2.1. Classification of the Substance or Mixture

Classification (GHS-US) Aquatic Acute 2 H411

Full text of H-phrases: see section 16

2.2. Label Elements

**GHS-US Labeling** 

Hazard Pictograms (GHS-US)

Signal Word (GHS-US) : none

Hazard Statements (GHS-US) : H411 - Toxic to aquatic life with long lasting effects.

Precautionary Statements (GHS-US) : Prevention

P273: Avoid release into the environment.

Response

P391: Collect Spillage

Storage none Disposal

P501 - Dispose of contents/container in accordance with local, regional, national, and

international regulations.



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#### Other Hazards

The mixture consists of substances capable of producing an aspiration hazard. Aspiration may result in chemical pneumonia (fluid in the lungs), severe lung damage, respiratory failure, and even death.

#### 2.4. Unknown Acute Toxicity (GHS-US)

20.73 percent of the mixture consists of ingredient(s) of unknown acute toxicity.

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

#### **Substances**

Not applicable

#### 3.2. **Mixture**

| Name   | Product Identifier  | % (w/w)                      | Classification (GHS-US)  |
|--|---------------------|------------------------------|--|
| heavy paraffinic, Distillates, petroleum,<br>hydrotreated heavy paraffinic | (CAS No) 64742-54-7 | 45 – 51,<br>55 - 67          | Asp. Tox. 1, H304  |
| Paraffin oils*   | (CAS No) 8012-95-1  | 0 - 0.1,<br>0.1- 1,<br>1 - 5 | Asp. Tox. 1, H304<br>Aquatic Chronic 4, H413                                       |
| 1-Decene, homopolymer, hydrogenated  | (CAS No) 68037-01-4 | 25 – 42,<br>20 - 30          | Asp. Tox. 1, H304  |
| Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts              | (CAS No) 68649-42-3 | 2.7 -<br>11.75               | Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Acute 2, H401 Aquatic Chronic 2, H411 |

<sup>\*</sup>The specific chemical identity and/or exact percentage of composition have been withheld as a trade secret within the meaning of the OSHA Hazard Communication Standard [29 CFR 1910.1200].

Full text of H-phrases: see section 16

## **SECTION 4: FIRST AID MEASURES**

#### 4.1. **Description of First Aid Measures**

General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label if possible). Inhalation: Remove to fresh air and keep at rest in a position comfortable for breathing. Obtain medical attention if breathing difficulty persists.

Skin Contact: Remove contaminated clothing. Drench affected area with water or soap and water for at least 15 minutes. Wash contaminated clothing before reuse. Obtain medical attention if irritation develops or persists.

Eye Contact: Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention.

Ingestion: Do NOT induce vomiting. Rinse mouth. Immediately call a POISON CENTER or doctor/physician.

#### Most Important Symptoms and Effects Both Acute and Delayed 4.2.

General: No known significant effects or critical hazards.

**Inhalation:** Overexposure may be irritating to the respiratory system. **Skin Contact:** Repeated or prolonged skin contact may cause irritation.

**Eye Contact:** Direct contact with the eyes is likely irritating.

**Ingestion:** Ingestion is likely to be harmful or have adverse effects. Chronic Symptoms: No known significant effects or critical hazards.

## Indication of Any Immediate Medical Attention and Special Treatment Needed

If you feel unwell, seek medical advice (show the label where possible).

<sup>\*</sup>More than one of the ranges of concentration prescribed by Controlled Products Regulations has been used where necessary, due to varying composition.



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## SECTION 5: FIRE-FIGHTING MEASURES

#### 5.1. Extinguishing Media

Suitable Extinguishing Media: Use extinguishing media appropriate for surrounding fire.

Unsuitable Extinguishing Media: Do not use a heavy water stream. Use of heavy stream of water may spread fire.

#### 5.2. Special Hazards Arising From the Substance or Mixture

Fire Hazard: Not flammable but will support combustion.

**Explosion Hazard:** Product is not explosive.

Reactivity: Hazardous reactions will not occur under normal conditions.

#### **5.3.** Advice for Firefighters

**Precautionary Measures Fire:** Exercise caution when fighting any chemical fire. Under fire conditions, hazardous fumes will be present.

**Firefighting Instructions:** Use water spray or fog for cooling exposed containers.

**Protection During Firefighting:** Do not enter fire area without proper protective equipment, including respiratory protection.

Hazardous Combustion Products: Under fire conditions, may produce fumes, smoke, oxides of carbon and hydrocarbons.

Other Information: Refer to Section 9 for flammability properties.

#### **Reference to Other Sections**

Refer to section 9 for flammability properties.

#### SECTION 6: ACCIDENTAL RELEASE MEASURES

#### 6.1. Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Avoid all contact with skin, eyes, or clothing. Avoid breathing (vapor, mist, spray).

#### 6.1.1. For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protection equipment (PPE).

**Emergency Procedures:** Evacuate unnecessary personnel.

#### 6.1.2. For Emergency Personnel

**Protective Equipment:** Equip cleanup crew with proper protection.

Emergency Procedures: Stop leak if safe to do so. Eliminate ignition sources. Ventilate area.

#### 6.2. Environmental Precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

#### 6.3. Methods and Material for Containment and Cleaning Up

For Containment: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

**Methods for Cleaning Up:** Clean up spills immediately and dispose of waste safely. Spills should be contained with mechanical barriers. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

#### 6.4. Reference to Other Sections

See Heading 8. Exposure controls and personal protection. For further information refer to section 13.

## **SECTION 7: HANDLING AND STORAGE**

#### 7.1. Precautions for Safe Handling

**Additional Hazards When Processed:** Any proposed use of this product in elevated-temperature processes should be thoroughly evaluated to assure that safe operating conditions are established and maintained. Practice good housekeeping - spillage can be slippery on smooth surface either wet or dry.

**Hygiene Measures:** Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

#### 7.2. Conditions for Safe Storage, Including Any Incompatibilities

**Technical Measures:** Comply with applicable regulations.

**Storage Conditions:** Store in a dry, cool and well-ventilated place. Keep container closed when not in use. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials.

Incompatible Materials: Strong acids, strong bases, strong oxidizers.



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## 7.3. Specific End Use(s)

Engine Oil.

# SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

#### 8.1. Control Parameters

For substances listed in section 3 that are not listed here, there are no established Exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), NIOSH (REL), OSHA (PEL), Canadian provincial governments, or the Mexican government.

| Paraffin oils (8012-95-1) |                          |  |
|---------------------------|--------------------------|--|
| USA ACGIH                 | ACGIH TWA (mg/m³)        | 5 mg/m³ (excluding metal working fluids, highly & severely refined-inhalable fraction) |
| USA ACGIH                 | ACGIH chemical category  | Not Classifiable as a Human Carcinogen highly and severely                             |
|                           |                          | refined, Suspected Human Carcinogen highly and severely refined                        |
| USA OSHA                  | OSHA PEL (TWA) (mg/m³)   | 5 mg/m <sup>3</sup>  |
| USA NIOSH                 | NIOSH REL (TWA) (mg/m³)  | 5 mg/m³  |
| USA NIOSH                 | NIOSH REL (STEL) (mg/m³) | 10 mg/m³   |
| USA IDLH                  | US IDLH (mg/m³)          | 2500 mg/m³   |
| Alberta                   | OEL STEL (mg/m³)         | 10 mg/m³   |
| Alberta                   | OEL TWA (mg/m³)          | 5 mg/m <sup>3</sup>  |
| British Columbia          | OEL TWA (mg/m³)          | 0.2 mg/m³ (mildly refined)   |
| Difficient Columbia       |                          | 1 mg/m³ (severely refined)   |
| Manitoba                  | OEL TWA (mg/m³)          | 5 mg/m³ (excluding metal working fluids, highly & severely                             |
|                           |                          | refined-inhalable fraction)  |
| New Brunswick             | OEL STEL (mg/m³)         | 10 mg/m <sup>3</sup>   |
| New Brunswick             | OEL TWA (mg/m³)          | 5 mg/m³ (as sampled by a method that does not collect                                  |
|                           | , 3,                     | vapor)   |
| Newfoundland & Labrador   | OEL TWA (mg/m³)          | 5 mg/m³ (excluding metal working fluids, highly & severely                             |
|                           |                          | refined-inhalable fraction)  |
| Nova Scotia               | OEL TWA (mg/m³)          | 5 mg/m³ (excluding metal working fluids, highly & severely                             |
|                           |                          | refined-inhalable fraction)  |
| Nunavut                   | OEL STEL (mg/m³)         | 10 mg/m <sup>3</sup>   |
| Nunavut                   | OEL TWA (mg/m³)          | 5 mg/m³  |
| Northwest Territories     | OEL STEL (mg/m³)         | 10 mg/m <sup>3</sup>   |
| Northwest Territories     | OEL TWA (mg/m³)          | 5 mg/m³  |
| Ontario                   | OEL TWA (mg/m³)          | 5 mg/m³ (pure, highly and severely refined, excluding                                  |
|                           |                          | metal working fluids-inhalable)  |
| Prince Edward Island      | OEL TWA (mg/m³)          | 5 mg/m³ (excluding metal working fluids, highly & severely                             |
|                           |                          | refined-inhalable fraction)  |
| Québec                    | VECD (mg/m³)             | 10 mg/m³ (mist)  |
| Québec                    | VEMP (mg/m³)             | 5 mg/m³ (mist)   |
| Saskatchewan              | OEL STEL (mg/m³)         | 10 mg/m <sup>3</sup>   |
| Saskatchewan              | OEL TWA (mg/m³)          | 5 mg/m³  |
| Yukon                     | OEL STEL (mg/m³)         | 10 mg/m <sup>3</sup>   |
| Yukon                     | OEL TWA (mg/m³)          | 5 mg/m³  |

#### 8.2. Exposure Controls

**Appropriate Engineering Controls:** Ensure adequate ventilation, especially in confined areas. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure all national/local regulations are observed.



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Personal Protective Equipment: Protective goggles. Gloves. Insufficient ventilation: wear respiratory protection.







Materials for Protective Clothing: Chemically resistant materials and fabrics.

Hand Protection: Wear chemically resistant protective gloves.

Eye Protection: Chemical goggles or safety glasses.

Skin and Body Protection: Wear suitable protective clothing.

Respiratory Protection: Use a NIOSH-approved respirator or self-contained breathing apparatus whenever exposure may exceed

established Occupational Exposure Limits.

Environmental Exposure Controls: Do not allow the product to be released into the environment.

**Consumer Exposure Controls:** Do not eat, drink or smoke during use.

## **SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

### 9.1. Information on Basic Physical and Chemical Properties

Physical State : Liquid Appearance : Amber

Odor: Slight HydrocarbonOdor Threshold: Not available

pH: Not availableEvaporation Rate: Not availableMelting Point: Not availableBoiling Point: 280 °C (536 °F)

Flash Point : 400 °C (COC) (752 °F)

**Auto-ignition Temperature** Not available Not available **Decomposition Temperature** Flammability (solid, gas) Not available **Lower Flammable Limit** Not available **Upper Flammable Limit** Not available Vapor Pressure Not available Relative Vapor Density at 20 °C Not available Not available **Relative Density** 

Specific Gravity

Solubility

Partition Coefficient: N-Octanol/Water

Viscosity

Viscosity, Kinematic

Explosive Properties

: 0.85

Not available

: Not available

: 50 mm²/s @ 40 °C

Explosive Properties

: Product is not explosive

Explosion Data – Sensitivity to Mechanical Impact : Not expected to present an explosion hazard due to mechanical impact Explosion Data – Sensitivity to Static Discharge : Not expected to present an explosion hazard due to static discharge

#### SECTION 10: STABILITY AND REACTIVITY

- **10.1. Reactivity:** Hazardous reactions will not occur under normal conditions.
- 10.2. Chemical Stability: Stable under recommended handling and storage conditions (see section 7).
- **10.3.** Possibility of Hazardous Reactions: Hazardous polymerization will not occur.
- **10.4. Conditions to Avoid:** Direct sunlight, extremely high or low temperatures, heat, hot surfaces, sparks, open flames, incompatible materials, and other ignition sources.



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**10.5. Incompatible Materials:** Strong acids, strong bases, strong oxidizers.

**10.6.** Hazardous Decomposition Products: Thermal decomposition generates: carbon oxides (CO, CO<sub>2</sub>). Hydrocarbons.

#### **SECTION 11: TOXICOLOGICAL INFORMATION**

#### 11.1. Information on Toxicological Effects - Product

Acute Toxicity: Not classified LD50 and LC50 Data: Not available Skin Corrosion/Irritation: Not classified Eye Damage/Irritation: Not classified

Respiratory or Skin Sensitization: Not classified

Germ Cell Mutagenicity: Not classified

**Teratogenicity:** Not classified **Carcinogenicity:** Not classified

Specific Target Organ Toxicity (Repeated Exposure): Not classified

Reproductive Toxicity: Not classified

Specific Target Organ Toxicity (Single Exposure): Not classified

**Aspiration Hazard:** Not classified

**Symptoms/Injuries After Inhalation:** Overexposure may be irritating to the respiratory system. **Symptoms/Injuries After Skin Contact:** Repeated or prolonged skin contact may cause irritation.

Symptoms/Injuries After Eye Contact: Direct contact with the eyes is likely irritating.

Symptoms/Injuries After Ingestion: Ingestion is likely to be harmful or have adverse effects.

Chronic Symptoms: Not Classified

#### 11.2. Information on Toxicological Effects - Ingredient(s)

LD50 and LC50 Data:

| Paraffin oils (8012-95-1)  |                  |  |
|--|------------------|--|
| LC50 Inhalation Rat  | 2062 ppm/4h      |  |
| ATE US (gases)   | 2,062.00 ppmV/4h |  |
| Heavy paraffinic, Distillates, petroleum, hydrotreated heavy paraffinic (64742-54-7) |                  |  |
| LD50 Oral Rat  | > 2000 mg/kg     |  |
| LD50 Dermal Rabbit   | > 2 g/kg         |  |
| Petroleum distillates, solvent dewaxed (64742-65-0)                                  |                  |  |
| LD50 Oral Rat  | > 5000 mg/kg     |  |
| LD50 Dermal Rabbit   | > 5 g/kg         |  |
| Paraffin oils (8012-95-1)  |                  |  |
| IARC Group   | 1                |  |

# **SECTION 12: ECOLOGICAL INFORMATION**

#### 12.1. Toxicity

Ecology - General: Toxic to aquatic life.

| Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts (68649-42-3) |   |  |
|--|---|--|
| LC50 Fish 1  | 1.0 - 5.0 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])        |  |
| EC50 Daphnia 1   | 1 - 1.5 mg/l (Exposure time: 48 h - Species: Daphnia magna)                         |  |
| LC 50 Fish 2   | 10.0 - 35.0 mg/l (Exposure time: 96 h - Species: Pimephales promelas [semi-static]) |  |
| Petroleum distillates, solvent dewaxed (64742-65-0)                        |   |  |
| EC50 Daphina 1   | > 1000 mg/L (Exposure time: 48 h – Species: Daphnia magna)                          |  |
| LC50 Fish 1  | > 5000 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss)                    |  |
| Distillates, petroleum, hydrotreated heavy paraffinic (64742-54-7)         |   |  |
| LC50 Fish 1  | > 5000 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss)                    |  |
| EC50 Daphnia 1   | > 1000 mg/l (Exposure time: 48 h - Species: Daphnia magna)                          |  |



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12.2. Persistence and Degradability

Not available

12.3. Bioaccumulative Potential

Not available

12.4. Mobility in Soil

Not available

12.5. Other Adverse Effects

Other Information: Avoid release to the environment.

## **SECTION 13: DISPOSAL CONSIDERATIONS**

#### 13.1. Waste treatment methods

**Sewage Disposal Recommendations:** Do not empty into drains; dispose of this material and its container in a safe way. Do not empty into drains. Do not dispose of waste into sewer.

**Waste Disposal Recommendations:** Dispose of waste material in accordance with all local, regional, national, provincial, territorial and international regulations.

#### **SECTION 14: TRANSPORT INFORMATION**

14.1. In Accordance with DOT
 14.2. In Accordance with IMDG
 14.3. In Accordance with IATA
 14.4. In Accordance with TDG
 Not regulated for transport
 Not regulated for transport
 Not regulated for transport

## **SECTION 15: REGULATORY INFORMATION**

#### 15.1. US Federal Regulations

| SARA Section 311/312 Hazard Classes | Delayed (chronic) health hazard |
|-------------------------------------|---------------------------------|

### 15.2. US State Regulations

#### Paraffin oils (8012-95-1)

- U.S. Massachusetts Right To Know List
- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. Pennsylvania RTK (Right to Know) List

#### 15.3. Canadian Regulations

| WHMIS Classification   | Not Classified   |  |
|--|--|--|
| Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts (68649-42-3) |  |  |
| Listed on the Canadian DSL (Domestic Substances List)                      |  |  |
| WHMIS Classification   | Class D Division 2 Subdivision B - Toxic material causing other toxic effects      |  |
| Paraffin oils (8012-95-1)  |  |  |
| Listed on the Canadian DSL (Domestic Substances List)                      |  |  |
| Listed on the Canadian IDL (Ingredient Disclosure List)                    |  |  |
| IDL Concentration 1 %  |  |  |
| WHMIS Classification   | Class D Division 2 Subdivision A - Very toxic material causing other toxic effects |  |
| Petroleum distillates, solvent dewaxed (64742-65-0)                        |  |  |
| Listed on the Canadian DSL (Domestic Substances List)                      |  |  |
| WHMIS Classification   | Uncontrolled product according to WHMIS classification criteria                    |  |
| Distillates, petroleum, hydrotreated heavy paraffinic (64742-54-7)         |  |  |
| Listed on the Canadian DSL (Domestic Substances List)                      |  |  |
| WHMIS Classification   | Uncontrolled product according to WHMIS classification criteria                    |  |



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This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all of the information required by CPR.

## SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

**Revision Date** : 6/11/2018

Other Information : This document has been prepared in accordance with the SDS requirements of the OSHA

Hazard Communication Standard 29 CFR 1910.1200.

#### **GHS Full Text Phrases:**

| Aquatic Acute 2   | Hazardous to the aquatic environment - Acute Hazard Category 2   |
|-------------------|--|
| Aquatic Chronic 2 | Hazardous to the aquatic environment - Chronic Hazard Category 2   |
| Aquatic Chronic 4 | Hazardous to the aquatic environment - Chronic Hazard Category 4   |
| Asp. Tox. 1       | Aspiration hazard Category 1   |
| Eye Dam. 1        | Serious eye damage/eye irritation Category 1   |
| Skin Irrit. 2     | Skin corrosion/irritation Category 2   |
| H304              | May be fatal if swallowed and enters airways   |
| H315              | Causes skin irritation   |
| H318              | Causes serious eye damage  |
| H391              | Collect Spillage   |
| H401              | Toxic to aquatic life  |
| H411              | Toxic to aquatic life with long lasting effects  |
| H413              | May cause long lasting harmful effects to aquatic life   |
| H501              | Dispose of contents/container in accordance with local, regional, national, and international regulations. |

#### Party Responsible for the Preparation of This Document

RelaDyne, LLC

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This Safety Data Sheet is prepared according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012. The 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.

North America GHS US 2012 & WHMIS 2

06/01/2018 DURAMAX SYNTHETIC 0W40 SDS# 208 8/8