

## Material Safety Data Sheet

### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT CODE: None

PRODUCT NAME: **Ace All Season Motor Oil 10W-40**

COMPANY: OLYMPIC OIL, LTD.  
 5000 W. 41<sup>st</sup> St.  
 Cicero, IL 60804  
 Phone: 708-876-7900 (M-F 6:00 A.M. - 4:30 P.M.)

### 2. COMPOSITION, INFORMATION ON INGREDIENTS

<u>COMPONENT (S)</u>	<u>CAS#</u>	<u>EXPOSURE LIMITS</u>	<u>%WT</u> (Approx.)
Severely Solvent Refined Heavy Paraffinic Petroleum oil	64741-88-4	Oil Mist PEL (5mg/m <sup>3</sup> ); TLV (5mg/m <sup>3</sup> ); STEL (10mg/m <sup>3</sup> )	60 - 70
Distillates (petroleum) Hydrotreated heavy Paraffinic OR Distillates (petroleum) Solvent dewaxed Heavy Paraffinic Additive Mixture	64742-54-7  64742-65-0	Oil Mist PEL (5mg/m <sup>3</sup> ); TLV (5mg/m <sup>3</sup> ); STEL (10mg/m <sup>3</sup> )	10 - 20
Zinc alkyldithiophosphate	Unknown	Oil Mist OSHA PEL (5mg/m <sup>3</sup> )	10 - 20
Alkylated Phenol	Unknown		1 - 5
Diphenylamine	122-39-4	ACGIH TLV-TWA (10mg/m <sup>3</sup> )	1 - 5 0.1 - 0.9

(This may not be a complete list of components)

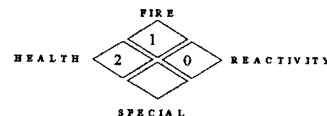
### 3. HAZARDS INFORMATION

#### EMERGENCY OVERVIEW

#### POTENTIAL HEALTH EFFECTS:

- May cause skin irritation.
- May cause eye irritation.
- May cause chronic health effects based on data with laboratory animals.

Hazard Rating:  
 4 - Extreme  
 3 - High  
 2 - Moderate  
 1 - Slight  
 0 - Insignificant



#### 4. FIRST AID MEASURES

**EYES CONTACT:** Flush eyes with clean, low-pressure water for at least 15 minutes, occasionally lifting the eyelids. Get immediate medical attention.

**SKIN CONTACT:** Wash skin thoroughly with plenty of soap and water. Immediately remove contaminated clothing. Launder contaminated clothing before reuse. Discard contaminated leather gloves and shoes. If irritation persists, get medical attention.

**INGESTION:** DO NOT INDUCE VOMITING. If more than a half-cup full of this material is swallowed, give quantities of water and obtain medical attention. Do not give anything by mouth to an unconscious person.

**INHALATION:** Vaporization is not expected at ambient temperatures. This material is not expected to be an inhalation problem under the anticipated conditions of use. In case of overexposure, move person to fresh air.

**NOTE TO PHYSICIAN:** Treat symptomatically.

#### 5. FIRE FIGHTING MEASURES

**FLAMMABLE PROPERTIES:**

FLASH POINT: 410 - 446°F. (210 - 230°C) METHOD: COC D92

FLAMMABLE LIMITS:

Lower Flammable Limit: Not Determined (N/D)

Upper Flammable Limit: Not Determined (N/D)

AUTOIGNITION TEMPERATURE: N/D °F (N/D °C)

**HAZARDOUS COMBUSTION PRODUCTS:**

Burning or excessive heating may produce smoke, carbon monoxide, carbon dioxide, aldehydes and other products of incomplete combustion. Hydrogen sulfide and alkyl mercaptans and sulfides may also be released. Under combustion conditions the oxides of calcium, sulfur, zinc and nitrogen will be formed.

**EXTINGUISHING MEDIA:**

Carbon dioxide, dry chemical, foam or water spray. Water is effective, but may cause frothing and splattering.

**FIRE FIGHTING INSTRUCTIONS:**

For fires involving this material, do not enter any enclosed or confined fire space without proper protective equipment. This may include self-contained breathing apparatus to protect against the hazardous effects of combustion products and oxygen deficiencies. If firefighters cannot work upwind to the

fire, respiratory protective equipment must be worn. Cool tanks and exposed containers with water. Material will float on water.

## 6. ACCIDENTAL RELEASE MEASURES

### **SMALL SPILL:**

Personal protective equipment must be worn (see Person Protection section for recommendations). Absorb spill with an inert material (e.g., dry sand or earth), then place in a chemical waste container. Use caution, material may present a slipping hazard.

### **LARGE SPILL:**

Contain spill and prevent it from entering all water bodies, if possible. Safely stop flow of spill. Evacuate non-essential personnel from immediate spill area. Ventilate area if spilled in a confined space or other poorly ventilated areas. In natural environments, get advice from ecologists on clean-up procedures. This material will float on water. Absorbent materials and pads can be used. Maximize product recovery for reuse or recycling. Transfer liquids and solid diking material to separate, suitable containers for recovery or disposal. Comply with all applicable laws. Spills may need to be reported to the National Response Center (800-424-8802).

## 7. HANDLING AND STORAGE

### **HANDLING:**

Keep away from heat, sparks and flame. Keep containers closed when not in use. Hands should be washed thoroughly after handling. To avoid product degradation, avoid water contamination. Empty containers contain residue, which may exhibit the hazards of the product. Do not attempt to refill or clean containers since residue is difficult to remove. Do not pressurize, cut, heat or weld containers.

### **STORAGE:**

KEEP OUT OF REACH OF CHILDREN! Odorous and toxic fumes may form from the decomposition of this material if stored at temperatures in excess of 113°F (45°C) for extended periods of time. Periods of exposure to high temperatures should be minimized

STORAGE TEMPERATURE: Ambient  
STORAGE PRESSURE: Atmospheric

## 8. EXPOSURE CONTROLS, PERSONAL PROTECTION

**1 ENGINEERING CONTROLS:**

Use adequate ventilation to keep oil mists of this material below applicable guideline(s)/standard(s).

**2 RESPIRATORY PROTECTION:**

Under normal conditions, a respirator is not required. If exposure exceeds the occupational exposure limits, follow OSHA standards or equivalent and wear proper NIOSH/MSHA-approved respiratory equipment.

**3 SKIN PROTECTION:**

Use chemical resistant gloves to avoid prolonged or repeated skin contact. Gloves should be replaced if signs of degradation or chemical breakthrough occur. Long sleeve shirt is recommended. When leaving work area, wash hands/exposed skin with soap and water.

**4 EYE PROTECTION:**

Use splash goggles or face shield. Eye wash water should be available. Hard contact lenses should not be worn.

**9. PHYSICAL AND CHEMICAL PROPERTIES (TYPICAL)**

<b>APPEARANCE:</b>	<u>Amber</u>	<b>BOILING POINT:</b>	<u>Not Determined</u>
<b>ODOR:</b>	<u>Mild</u>	<b>SOLUBILITY IN WATER:</b>	<u>Not Determined</u>
<b>PHYSICAL STATE:</b>	<u>Liquid</u>	<b>SPECIFIC GRAVITY:</b>	<u>0.86 – 0.88</u>
<b>VAPOR PRESSURE:</b>	Not <u>Determined</u>	<b>VISCOSITY @ 100 °C (cSt):</b>	<u>14.1 – 15.5</u>
<b>VAPOR DENSITY:</b>	Not <u>Determined</u>	<b>PERCENT VOLATILE:</b>	<u>Negligible</u>

**10. STABILITY AND REACTIVITY**

**CHEMICAL STABILITY (CONDITIONS TO AVOID):** Material is considered stable at room temperature and pressure. Avoid heat, sparks and open flame.

**INCOMPATIBILITY:** Strong oxidizing agents

## **11. TOXICOLOGICAL INFORMATION**

**EYE EFFECTS:** May cause eye irritation based on component data.

**SKIN EFFECTS:** Mild skin irritation may occur upon short-term exposure. Long-term exposure may cause redness, edema, drying and cracking of skin. Based on component data.

**ACUTE ORAL EFFECTS:** No significant adverse health effects are expected to occur upon short-term exposure based on data from components.

**ACUTE INHALATION EFFECTS:** No significant adverse health effects are expected to occur under normal conditions of use. However, exposure to petroleum mist at high levels may be irritating to the nose, throat and lungs.

**CHRONIC TOXICITY:** May cause chronic health effects based on data from components.

**CARCINOGENICITY:** This product is formulated with mineral oils, which are considered to be severely refined and not considered to be carcinogenic under IARC. The IP346 test has not been used to evaluate these oils. Laboratory studies sponsored by the American Petroleum Institute show that mice develop skin cancer following repeated application and continuous exposure to used motor oil composite. Avoid contact with used motor oils.

**MUTAGENICITY:** No Data

**TERATOLOGY (BIRTH DEFECT) INFORMATION:** No Data

**REPRODUCTION INFORMATION:** No Data

## **12. ECOLOGICAL INFORMATION**

The spilled material and any soil or water that it has contaminated may be hazardous to animal/aquatic life.

**CHEMICAL FATE INFORMATION:** Not determined.

## **13. DISPOSAL CONSIDERATIONS**

To determine the proper method of disposal, refer to RCRA (40 CFR 261) as well as federal EPA and state and local regulations. Conditions of use may cause this material to become a "Hazardous Waste", as defined by state or federal laws. Use approved treatment, transporters and disposal sites in

compliance with all applicable laws.

#### 14. TRANSPORT INFORMATION

**DOT Hazard Class:** Not Regulated  
**UN/NA Number:** Not Regulated

#### 15. REGULATORY INFORMATION

**SUPERFUND AMMENDMENTS AND REAUTHORIZATION ACT OF 1986 (SARA), TITLE III:** Contains 1 % as Zinc.

This product does not contain greater than 1.0 % of any chemical on the SARA Extremely Hazardous list.

**TOXIC SUBSTANCES CONTROL ACT (TSCA):** All components of this product are listed on the TSCA inventory.  
Section 8d (Dimethyl silicones and siloxanes)  
Section 8d (Nonane)

**COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION AND LIABILITY ACT (CERCLA):** Contains 1% as Zinc.

**CALIFORNIA SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT OF 1986 - PROPOSITION 65:** Based on information currently available, this product is known to contain chemicals currently listed as carcinogens or reproductive toxins under California Proposition 65 at levels which would be subject to the proposition: Arsenic less than 1 ppm, Cadmium less than 1 ppm, Lead less than 1 ppm. If this product is reformulated or further processed, further evaluation should be done based upon such reformulation or processing, as well as upon its final composition and use.

#### 16. OTHER INFORMATION

##### **DISCLAIMER OF LIABILITY**

The information in this MSDS was obtained from sources, which we believe are reliable. **HOWEVER, THE INFORMATION IS PROVIDED WITHOUT ANY WARRANTY, EXPRESS OR IMPLIED, REGARDING ITS CORRECTNESS.**

The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. **FOR**

***THIS AND OTHER REASONS, WE DO NOT ASSUME  
RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR  
LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY  
CONNECTED WITH THE HANDLING, STORAGE, USE OR  
DISPOSAL OF THIS PRODUCT.***

This MSDS was prepared and is to be used only for this product. If the product is used as a component in another product, this MSDS information may not be applicable.

Date: 11 June 2003

Revision Date: 15 June 1999

## Material Safety Data Sheet

### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT CODE: None

PRODUCT NAME: **Ace All Season Motor Oil 10W-30**

COMPANY: OLYMPIC OIL, LTD.  
5000 W. 41<sup>st</sup> St.  
Cicero, IL 60804  
Phone: 708-876-7900 (M-F 6:00 A.M. - 4:30 P.M.)

### 2. COMPOSITION, INFORMATION ON INGREDIENTS

<u>COMPONENT (S)</u>	<u>CAS#</u>	<u>EXPOSURE LIMITS</u>	<u>%WT</u> (Approx.)
Severely Solvent Refined Heavy Paraffinic Petroleum oil	64741-88-4	Oil Mist PEL (5mg/m <sup>3</sup> ); TLV (5mg/m <sup>3</sup> ); STEL (10mg/m <sup>3</sup> )	80 - 90
Additive Mixture	Proprietary	Oil Mist OSHA PEL (5mg/m <sup>3</sup> )	10 - 20
Zinc alkyldithiophosphate	Unknown		1 - 5
Alkylated Phenol	Unknown		1 - 5
Diphenylamine	122-39-4	ACGIH TLV-TWA (10mg/m <sup>3</sup> )	0.1 - 0.9

(This may not be a complete list of components)

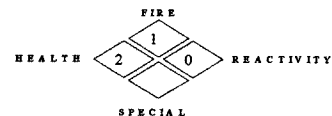
### 3. HAZARDS INFORMATION

#### **EMERGENCY OVERVIEW**

#### **POTENTIAL HEALTH EFFECTS:**

- May cause skin irritation.
- May cause eye irritation.
- May cause chronic health effects based on data with laboratory animals.

Hazard Rating:  
4 - Extreme  
3 - High  
2 - Moderate  
1 - Slight  
0 - Insignificant



### 4. FIRST AID MEASURES

**EYES CONTACT:** Flush eyes with clean, low-pressure water for at least 15 minutes, occasionally lifting the eyelids. Get immediate medical attention.

**SKIN CONTACT:** Wash skin thoroughly with plenty of soap and water. Immediately remove contaminated clothing. Launder contaminated clothing before reuse. Discard contaminated leather gloves and shoes. If irritation persists, get medical attention.

**INGESTION:** DO NOT INDUCE VOMITING. If more than a half-cup full of this material is swallowed, give quantities of water and obtain medical attention. Do not give anything by mouth to an unconscious person.

**INHALATION:** Vaporization is not expected at ambient temperatures. This material is not expected to be an inhalation problem under the anticipated conditions of use. In case of overexposure, move person to fresh air.

**NOTE TO PHYSICIAN:** Treat symptomatically.

## 5. FIRE FIGHTING MEASURES

### **FLAMMABLE PROPERTIES:**

FLASH POINT: 410 - 446°F. (210 - 230°C) METHOD: COC D92

FLAMMABLE LIMITS:

Lower Flammable Limit: Not Determined (N/D)

Upper Flammable Limit: Not Determined (N/D)

AUTOIGNITION TEMPERATURE: N/D °F (N/D °C)

### **HAZARDOUS COMBUSTION PRODUCTS:**

Burning or excessive heating may produce smoke, carbon monoxide, carbon dioxide, aldehydes and other products of incomplete combustion. Hydrogen sulfide and alkyl mercaptans and sulfides may also be released. Under combustion conditions the oxides of calcium, sulfur, zinc and nitrogen will be formed.

### **EXTINGUISHING MEDIA:**

Carbon dioxide, dry chemical, foam or water spray. Water is effective, but may cause frothing and splattering.

### **FIRE FIGHTING INSTRUCTIONS:**

For fires involving this material, do not enter any enclosed or confined fire space without proper protective equipment. This may include self-contained breathing apparatus to protect against the hazardous effects of combustion products and oxygen deficiencies. If firefighters cannot work upwind to the fire, respiratory protective equipment must be worn. Cool tanks and exposed containers with water. Material will float on water.

## **6. ACCIDENTAL RELEASE MEASURES**

### **SMALL SPILL:**

Personal protective equipment must be worn (see Person Protection section for recommendations). Absorb spill with an inert material (e.g., dry sand or earth), then place in a chemical waste container. Use caution, material may present a slipping hazard.

### **LARGE SPILL:**

Contain spill and prevent it from entering all water bodies, if possible. Safely stop flow of spill. Evacuate non-essential personnel from immediate spill area. Ventilate area if spilled in a confined space or other poorly ventilated areas. In natural environments, get advice from ecologists on clean-up procedures. This material will float on water. Absorbent materials and pads can be used. Maximize product recovery for reuse or recycling. Transfer liquids and solid diking material to separate, suitable containers for recovery or disposal. Comply with all applicable laws. Spills may need to be reported to the National Response Center (800-424-8802).

## **7. HANDLING AND STORAGE**

### **HANDLING:**

Keep away from heat, sparks and flame. Keep containers closed when not in use. Hands should be washed thoroughly after handling. To avoid product degradation, avoid water contamination. Empty containers contain residue, which may exhibit the hazards of the product. Do not attempt to refill or clean containers since residue is difficult to remove. Do not pressurize, cut, heat or weld containers.

### **STORAGE:**

**KEEP OUT OF REACH OF CHILDREN!** Odorous and toxic fumes may form from the decomposition of this material if stored at temperatures in excess of 113°F (45°C) for extended periods of time. Periods of exposure to high temperatures should be minimized

STORAGE TEMPERATURE: Ambient

STORAGE PRESSURE: Atmospheric

## **8. EXPOSURE CONTROLS, PERSONAL PROTECTION**

### **1 ENGINEERING CONTROLS:**

Use adequate ventilation to keep oil mists of this material below applicable guideline(s)/standard(s).

**2 RESPIRATORY PROTECTION:**

Under normal conditions, a respirator is not required. If exposure exceeds the occupational exposure limits, follow OSHA standards or equivalent and wear proper NIOSH/MSHA-approved respiratory equipment.

**3 SKIN PROTECTION:**

Use chemical resistant gloves to avoid prolonged or repeated skin contact. Gloves should be replaced if signs of degradation or chemical breakthrough occur. Long sleeve shirt is recommended. When leaving work area, wash hands/exposed skin with soap and water.

**4 EYE PROTECTION:**

Use splash goggles or face shield. Eye wash water should be available. Hard contact lenses should not be worn.

**9. PHYSICAL AND CHEMICAL PROPERTIES (TYPICAL)**

<b>APPEARANCE:</b>	<u>Amber</u>	<b>BOILING POINT:</b>	<u>Not Determined</u>
<b>ODOR:</b>	<u>Mild</u>	<b>SOLUBILITY IN WATER:</b>	<u>Not Determined</u>
<b>PHYSICAL STATE:</b>	<u>Liquid</u>	<b>SPECIFIC GRAVITY:</b>	<u>0.86 – 0.88</u>
<b>VAPOR PRESSURE:</b>	<u>Not Determined</u>	<b>VISCOSITY @ 100 °C (cSt):</b>	<u>10.0 – 11.5</u>
<b>VAPOR DENSITY:</b>	<u>Not Determined</u>	<b>PERCENT VOLATILE:</b>	<u>Negligible</u>

**10. STABILITY AND REACTIVITY**

**CHEMICAL STABILITY (CONDITIONS TO AVOID):** Material is considered stable at room temperature and pressure. Avoid heat, sparks and open flame.

**INCOMPATIBILITY:** Strong oxidizing agents

**11. TOXICOLOGICAL INFORMATION**

**EYE EFFECTS:** May cause eye irritation based on component data.

**SKIN EFFECTS:** Mild skin irritation may occur upon short-term exposure. Long-term exposure may cause redness, edema, drying and cracking of skin. Based on component data.

**ACUTE ORAL EFFECTS:** No significant adverse health effects are expected to occur upon short-term exposure based on data from components.

**ACUTE INHALATION EFFECTS:** No significant adverse health effects are expected to occur under normal conditions of use. However, exposure to petroleum mist at high levels may be irritating to the nose, throat and lungs.

**CHRONIC TOXICITY:** May cause chronic health effects based on data from components.

**CARCINOGENICITY:** This product is formulated with mineral oils, which are considered to be severely refined and not considered to be carcinogenic under IARC. The IP346 test has not been used to evaluate these oils. Laboratory studies sponsored by the American Petroleum Institute show that mice develop skin cancer following repeated application and continuous exposure to used motor oil composite. Avoid contact with used motor oils.

**MUTAGENICITY:** No Data

**TERATOLOGY (BIRTH DEFECT) INFORMATION:** No Data

**REPRODUCTION INFORMATION:** No Data

## **12. ECOLOGICAL INFORMATION**

The spilled material and any soil or water that it has contaminated may be hazardous to animal/aquatic life.

**CHEMICAL FATE INFORMATION:** Not determined.

## **13. DISPOSAL CONSIDERATIONS**

To determine the proper method of disposal, refer to RCRA (40 CFR 261) as well as federal EPA and state and local regulations. Conditions of use may cause this material to become a "Hazardous Waste", as defined by state or federal laws. Use approved treatment, transporters and disposal sites in compliance with all applicable laws.

**14. TRANSPORT INFORMATION**

**DOT Hazard Class:** Not Regulated  
**UN/NA Number:** Not Regulated

**15. REGULATORY INFORMATION**

**SUPERFUND AMMENDMENTS AND REAUTHORIZATION ACT OF 1986 (SARA), TITLE III:** Contains 1 % as Zinc.

This product does not contain greater than 1.0 % of any chemical on the SARA Extremely Hazardous list.

**TOXIC SUBSTANCES CONTROL ACT (TSCA):** All components of this product are listed on the TSCA inventory.  
Section 8d (Dimethyl silicones and siloxanes)  
Section 8d (Nonane)

**COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION AND LIABILITY ACT (CERCLA):** Contains 1% as Zinc.

**CALIFORNIA SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT OF 1986 - PROPOSITION 65:** Based on information currently available, this product is known to contain chemicals currently listed as carcinogens or reproductive toxins under California Proposition 65 at levels which would be subject to the proposition: Arsenic less than 1 ppm, Cadmium less than 1 ppm, Lead less than 1 ppm. If this product is reformulated or further processed, further evaluation should be done based upon such reformulation or processing, as well as upon its final composition and use.

**16. OTHER INFORMATION**

**DISCLAIMER OF LIABILITY**

The information in this MSDS was obtained from sources, which we believe are reliable. **HOWEVER, THE INFORMATION IS PROVIDED WITHOUT ANY WARRANTY, EXPRESS OR IMPLIED, REGARDING ITS CORRECTNESS.**

The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. **FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY**

***CONNECTED WITH THE HANDLING, STORAGE, USE OR  
DISPOSAL OF THIS PRODUCT.***

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Date: 11 June 2003

Revision Date: 01 December 2001

## Material Safety Data Sheet

### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT CODE: None

PRODUCT NAME: **Ace All Season Motor Oil 5W-30**

COMPANY: OLYMPIC OIL, LTD.  
5000 W. 41<sup>st</sup> St.  
Cicero, IL 60804  
Phone: 708-876-7900 (M-F 6:00 A.M. - 4:30 P.M.)

### 2. COMPOSITION, INFORMATION ON INGREDIENTS

<u>COMPONENT (S)</u>	<u>CAS#</u>	<u>EXPOSURE LIMITS</u>	<u>%WT</u> (Approx.)
Distillates (petroleum), Hydrotreated Heavy Paraffinic	64742-54-7	Oil Mist PEL (5mg/m <sup>3</sup> ); TLV (5mg/m <sup>3</sup> ); STEL (10mg/m <sup>3</sup> )	40 - 50
Distillates (petroleum), Solvent Dewaxed Heavy Paraffinic	64742-65-0	Oil Mist PEL (5mg/m <sup>3</sup> ); TLV (5mg/m <sup>3</sup> ); STEL (10mg/m <sup>3</sup> )	30 - 40
Hydrotreated Distillate Light Paraffinic	64742-55-8	Oil Mist PEL (5mg/m <sup>3</sup> ); TLV (5mg/m <sup>3</sup> ); STEL (10mg/m <sup>3</sup> )	1 - 10
Additive Mixture	Proprietary	Oil Mist OSHA PEL (5mg/m <sup>3</sup> )	10 - 20
Zinc alkyldithiophosphate	Unknown	NE	1 - 5
Alkylated Phenol	Unknown	NE	1 - 5
Diphenylamine	122-39-4	ACGIH TLV-TWA (10mg/m <sup>3</sup> )	0.1 - 0.9

(This may not be a complete list of components)

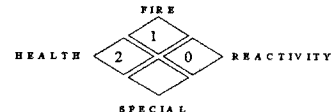
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#### EMERGENCY OVERVIEW

#### POTENTIAL HEALTH EFFECTS:

- May cause skin irritation.
- May cause eye irritation.
- May cause chronic health effects based on data with laboratory animals.

Hazard Rating:  
4 - Extreme  
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#### 4. **FIRST AID MEASURES**

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**INGESTION:** DO NOT INDUCE VOMITING. If more than a half-cup full of this material is swallowed, give quantities of water and obtain medical attention. Do not give anything by mouth to an unconscious person.

**INHALATION:** Vaporization is not expected at ambient temperatures. This material is not expected to be an inhalation problem under the anticipated conditions of use. In case of overexposure, move person to fresh air.

**NOTE TO PHYSICIAN:** Treat symptomatically.

#### 5. **FIRE FIGHTING MEASURES**

**FLAMMABLE PROPERTIES:**

FLASH POINT: 392 - 437°F. (200 - 225°C) METHOD: COC D92

FLAMMABLE LIMITS:

Lower Flammable Limit: Not Determined (N/D)

Upper Flammable Limit: Not Determined (N/D)

AUTOIGNITION TEMPERATURE: N/D °F (N/D °C)

**HAZARDOUS COMBUSTION PRODUCTS:**

Burning or excessive heating may produce smoke, carbon monoxide, carbon dioxide, aldehydes and other products of incomplete combustion. Hydrogen sulfide and alkyl mercaptans and sulfides may also be released. Under combustion conditions the oxides of calcium, sulfur, phosphorous, zinc and nitrogen will be formed.

**EXTINGUISHING MEDIA:**

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### **STORAGE:**

**KEEP OUT OF REACH OF CHILDREN!** Odorous and toxic fumes may form from the decomposition of this material if stored at temperatures in excess of 113°F (45°C) for extended periods of time. Periods of exposure to high temperatures should be minimized

STORAGE TEMPERATURE: Ambient  
STORAGE PRESSURE: Atmospheric

## 8. EXPOSURE CONTROLS, PERSONAL PROTECTION

### 1 ENGINEERING CONTROLS:

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Use chemical resistant gloves to avoid prolonged or repeated skin contact. Gloves should be replaced if signs of degradation or chemical breakthrough occur. Long sleeve shirt is recommended. When leaving work area, wash hands/exposed skin with soap and water.

### 4 EYE PROTECTION:

Use splash goggles or face shield. Eye wash water should be available. Hard contact lenses should not be worn.

## 9. PHYSICAL AND CHEMICAL PROPERTIES (TYPICAL)

<b>APPEARANCE:</b>	<u>Light brown</u>	<b>BOILING POINT:</b>	<u>Not Determined</u>
<b>ODOR:</b>	<u>Mild</u>	<b>SOLUBILITY IN WATER:</b>	<u>Not Determined</u>
<b>PHYSICAL STATE:</b>	<u>Liquid</u>	<b>SPECIFIC GRAVITY:</b>	<u>0.85 – 0.87</u>
<b>VAPOR PRESSURE:</b>	Not <u>Determined</u>	<b>VISCOSITY @ 100 °C (cSt):</b>	<u>10.0 – 11.5</u>
<b>VAPOR DENSITY:</b>	Not <u>Determined</u>	<b>PERCENT VOLATILE:</b>	<u>Negligible</u>

## 10. STABILITY AND REACTIVITY

**CHEMICAL STABILITY (CONDITIONS TO AVOID):** Material is considered stable at room temperature and pressure. Avoid heat, sparks and open flame.

**INCOMPATIBILITY:** Strong oxidizing agents

## **11. TOXICOLOGICAL INFORMATION**

**EYE EFFECTS:** May cause eye irritation based on component data.

**SKIN EFFECTS:** Mild skin irritation may occur upon short-term exposure. Long-term exposure may cause redness, edema, drying and cracking of skin. Based on component data.

**ACUTE ORAL EFFECTS:** No significant adverse health effects are expected to occur upon short-term exposure based on data from components.

**ACUTE INHALATION EFFECTS:** No significant adverse health effects are expected to occur under normal conditions of use. However, exposure to petroleum mist at high levels may be irritating to the nose, throat and lungs.

**CHRONIC TOXICITY:** May cause chronic health effects based on data from components.

**CARCINOGENICITY:** This product is formulated with mineral oils, which are considered to be severely refined and not considered to be carcinogenic under IARC. The IP346 test has not been used to evaluate these oils.

**MUTAGENICITY:** No Data

**TERATOLOGY (BIRTH DEFECT) INFORMATION:** No Data

**REPRODUCTION INFORMATION:** No Data

## **12. ECOLOGICAL INFORMATION**

The spilled material and any soil or water that it has contaminated may be hazardous to animal/aquatic life.

**CHEMICAL FATE INFORMATION:** Not determined.

## **13. DISPOSAL CONSIDERATIONS**

To determine the proper method of disposal, refer to RCRA (40 CFR 261) as well as federal EPA and state and local regulations. Conditions of use may cause this material to become a "Hazardous Waste", as defined by state or federal laws. Use approved treatment, transporters and disposal sites in compliance with all applicable laws.

**14. TRANSPORT INFORMATION**

**DOT Hazard Class:** Not Regulated  
**UN/NA Number:** Not Regulated

**15. REGULATORY INFORMATION**

**SUPERFUND AMMENDMENTS AND REAUTHORIZATION ACT OF 1986 (SARA), TITLE III:** Contains 1 % as Zinc.

This product does not contain greater than 1.0 % of any chemical on the SARA Extremely Hazardous list.

**TOXIC SUBSTANCES CONTROL ACT (TSCA):** All components of this product are listed on the TSCA inventory.  
Section 8d (Dimethyl silicones and siloxanes)  
Section 8d (Nonane)

**COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION AND LIABILITY ACT (CERCLA):** Contains 1% as Zinc.

**CALIFORNIA SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT OF 1986 - PROPOSITION 65:** Based on information currently available, this product is known to contain chemicals currently listed as carcinogens or reproductive toxins under California Proposition 65 at levels which would be subject to the proposition: Arsenic less than 1 ppm, Cadmium less than 1 ppm, Lead less than 1 ppm. If this product is reformulated or further processed, further evaluation should be done based upon such reformulation or processing, as well as upon its final composition and use.

**16. OTHER INFORMATION**

**DISCLAIMER OF LIABILITY**

The information in this MSDS was obtained from sources, which we believe are reliable. **HOWEVER, THE INFORMATION IS PROVIDED WITHOUT ANY WARRANTY, EXPRESS OR IMPLIED, REGARDING ITS CORRECTNESS.**

The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. **FOR**

***THIS AND OTHER REASONS, WE DO NOT ASSUME  
RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR  
LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY  
CONNECTED WITH THE HANDLING, STORAGE, USE OR  
DISPOSAL OF THIS PRODUCT.***

This MSDS was prepared and is to be used only for this product. If the product is used as a component in another product, this MSDS information may not be applicable.

Date: 24 June 2003

Revision Date: 17 February 2003