

Product Name: MOBIL EAL ARCTIC 68  
Revision Date: 28Aug2007  
Page 1 of 8

## SAFETY DATA SHEET

### SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

As of the revision date above, this (M)SDS meets the regulations in the United Kingdom & Ireland.

#### PRODUCT

**Product Name:** MOBIL EAL ARCTIC 68  
**Product Description:** Synthetic Base Stocks and Additives  
**Product Code:** 201560252030, 400631, 601088-00  
**Intended Use:** Compressor oil

#### COMPANY IDENTIFICATION

**Supplier:** EXXONMOBIL MARINE LIMITED  
ExxonMobil House  
MAILPOINT 29, ERMYN WAY  
KT22 8UX LEATHERHEAD  
United Kingdom

**24 Hour Environmental / Health Emergency**

+44 1372 222 000

**Telephone**

**Product Technical Information**

EAME +420 221 456 618 / Americas +1 800 662 4525 / Asia  
Pacific +8621 5464 4588 EXT 5842  
sds-norden@exxonmobil.com

**e-mail**

### SECTION 2 HAZARDS IDENTIFICATION

This material is not considered to be hazardous according to regulatory guidelines see Section 15.

#### HEALTH HAZARDS

Low order of toxicity. Excessive exposure may result in eye, skin, or respiratory irritation. High-pressure injection under skin may cause serious damage.

**Note:** This material should not be used for any other purpose than the intended use in Section 1 without expert advice. Health studies have shown that chemical exposure may cause potential human health risks which may vary from person to person.

### SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

No Reportable Hazardous Substance(s) or Complex Substance(s).

### SECTION 4 FIRST AID MEASURES

#### INHALATION

Remove from further exposure. For those providing assistance, avoid exposure to yourself or others. Use adequate respiratory protection. If respiratory irritation, dizziness, nausea, or unconsciousness occurs, seek

Product Name: MOBIL EAL ARCTIC 68

Revision Date: 28Aug2007

Page 2 of 8

---

immediate medical assistance. If breathing has stopped, assist ventilation with a mechanical device or use mouth-to-mouth resuscitation.

#### SKIN CONTACT

Wash contact areas with soap and water. If product is injected into or under the skin, or into any part of the body, regardless of the appearance of the wound or its size, the individual should be evaluated immediately by a physician as a surgical emergency. Even though initial symptoms from high pressure injection may be minimal or absent, early surgical treatment within the first few hours may significantly reduce the ultimate extent of injury.

#### EYE CONTACT

Flush thoroughly with water. If irritation occurs, get medical assistance.

#### INGESTION

First aid is normally not required. Seek medical attention if discomfort occurs.

|                  |                               |
|------------------|-------------------------------|
| <b>SECTION 5</b> | <b>FIRE FIGHTING MEASURES</b> |
|------------------|-------------------------------|

#### EXTINGUISHING MEDIA

Appropriate Extinguishing Media: Use water fog, foam, dry chemical or carbon dioxide (CO<sub>2</sub>) to extinguish flames.

Inappropriate Extinguishing Media: Straight streams of water

#### FIRE FIGHTING

Fire Fighting Instructions: Evacuate area. Prevent run-off from fire control or dilution from entering streams, sewers or drinking water supply. Fire-fighters should use standard protective equipment and in enclosed spaces, self-contained breathing apparatus (SCBA). Use water spray to cool fire exposed surfaces and to protect personnel.

Unusual Fire Hazards: Pressurised mists may form a flammable mixture.

Hazardous Combustion Products: Oxides of carbon, Incomplete combustion products, Smoke, Fume

#### FLAMMABILITY PROPERTIES

Flash Point [Method]: >240C (464F) [ ASTM D-92]

Flammable Limits (Approximate volume % in air): LEL: N/D UEL: N/D

Autoignition Temperature: N/D

|                  |                                    |
|------------------|------------------------------------|
| <b>SECTION 6</b> | <b>ACCIDENTAL RELEASE MEASURES</b> |
|------------------|------------------------------------|

#### NOTIFICATION PROCEDURES

In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

#### SPILL MANAGEMENT

Land Spill: Stop leak if you can do so without risk. Recover by pumping or with suitable absorbent.

Product Name: MOBIL EAL ARCTIC 68

Revision Date: 28Aug2007

Page 3 of 8

Water Spill: Stop leak if you can do so without risk. Confine the spill immediately with booms. Warn other shipping. Remove from the surface by skimming or with suitable absorbents. Seek the advice of a specialist before using dispersants.

Water spill and land spill recommendations are based on the most likely spill scenario for this material; however, geographic conditions, wind, temperature, (and in the case of a water spill) wave and current direction and speed may greatly influence the appropriate action to be taken. For this reason, local experts should be consulted. Note: Local regulations may prescribe or limit action to be taken.

#### ENVIRONMENTAL PRECAUTIONS

Large Spills: Dyke far ahead of liquid spill for later recovery and disposal. Prevent entry into waterways, sewers, basements or confined areas.

### SECTION 7

#### HANDLING AND STORAGE

##### HANDLING

Prevent small spills and leakage to avoid slip hazard.

Static Accumulator: This material is a static accumulator.

##### STORAGE

Do not store in open or unlabelled containers.

### SECTION 8

#### EXPOSURE CONTROLS / PERSONAL PROTECTION

**Exposure limits/standards for materials that can be formed when handling this product:** When mists / aerosols can occur, the following are recommended: 5 mg/m<sup>3</sup> - ACGIH TLV, 10 mg/m<sup>3</sup> - ACGIH STEL.

Information about recommended monitoring procedures can be obtained from the following agency(ies)/institute(s):

France L'Institut National de Recherche et de Sécurité (INRS) Germany Berufsgenossenschaftliches

Institut für Arbeitssicherheit (BIA) UK Health and Safety Executive (HSE)

#### ENGINEERING CONTROLS

The level of protection and types of controls necessary will vary depending upon potential exposure conditions.

Control measures to consider:

No special requirements under ordinary conditions of use and with adequate ventilation.

#### PERSONAL PROTECTION

Personal protective equipment selections vary based on potential exposure conditions such as applications, handling practices, concentration and ventilation. Information on the selection of protective equipment for use with this material, as provided below, is based upon intended, normal usage.

**Respiratory Protection:** If engineering controls do not maintain airborne contaminant concentrations at a level which is adequate to protect worker health, an approved respirator may be appropriate. Respirator selection, use, and maintenance must be in accordance with regulatory requirements, if applicable. Types of respirators to be considered for this material include:

Product Name: MOBIL EAL ARCTIC 68

Revision Date: 28Aug2007

Page 4 of 8

---

No protection is ordinarily required under normal conditions of use and with adequate ventilation.

For high airborne concentrations, use an approved supplied-air respirator, operated in positive pressure mode. Supplied air respirators with an escape bottle may be appropriate when oxygen levels are inadequate, gas/vapour warning properties are poor, or if air purifying filter capacity/rating may be exceeded.

**Hand Protection:** Any specific glove information provided is based on published literature and glove manufacturer data. Work conditions can greatly affect glove durability; inspect and replace worn or damaged gloves. The types of gloves to be considered for this material include:

No protection is ordinarily required under normal conditions of use.

**Eye Protection:** If contact is likely, safety glasses with side shields are recommended.

**Skin and Body Protection:** Any specific clothing information provided is based on published literature or manufacturer data. The types of clothing to be considered for this material include:

No skin protection is ordinarily required under normal conditions of use. In accordance with good industrial hygiene practices, precautions should be taken to avoid skin contact.

**Specific Hygiene Measures:** Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Discard contaminated clothing and footwear that cannot be cleaned. Practice good housekeeping.

## ENVIRONMENTAL CONTROLS

See Sections 6, 7, 12, 13.

## SECTION 9

## PHYSICAL AND CHEMICAL PROPERTIES

Typical physical and chemical properties are given below. Consult the Supplier in Section 1 for additional data.

### GENERAL INFORMATION

**Physical State:** Liquid

**Colour:** Colourless

**Odour:** Characteristic

**Odour Threshold:** N/D

### IMPORTANT HEALTH, SAFETY, AND ENVIRONMENTAL INFORMATION

**Relative Density (at 15 C):** 0.968

**Flash Point [Method]:** >240C (464F) [ASTM D-92]

**Flammable Limits (Approximate volume % in air):** LEL: N/D UEL: N/D

**Autoignition Temperature:** N/D

**Boiling Point / Range:** N/D

**Vapour Density (Air = 1):** N/D

**Vapour Pressure:** [N/D at 20°C]

**Evaporation Rate (N-Butyl Acetate = 1):** N/D

**pH:** N/A

**Log Pow (n-Octanol/Water Partition Coefficient):** N/A

**Solubility in Water:** Negligible

**Viscosity:** 64.9 cSt (64.9 mm<sup>2</sup>/sec) at 40°C | 8.3 cSt (8.3 mm<sup>2</sup>/sec) at 100C

**Oxidising properties:** See Sections 3, 15, 16.

Product Name: MOBIL EAL ARCTIC 68

Revision Date: 28Aug2007

Page 5 of 8

#### OTHER INFORMATION

**Freezing Point:** N/D

**Melting Point:** N/A

**Pour Point:** -36°C (-33°F)

| SECTION 10 | STABILITY AND REACTIVITY |
|------------|--------------------------|
|------------|--------------------------|

**STABILITY:** Material is stable under normal conditions.

**CONDITIONS TO AVOID:** Excessive heat. High energy sources of ignition.

**MATERIALS TO AVOID:** Strong oxidisers

**HAZARDOUS DECOMPOSITION PRODUCTS:** Material does not decompose at ambient temperatures.

**HAZARDOUS POLYMERIZATION:** Will not occur.

| SECTION 11 | TOXICOLOGICAL INFORMATION |
|------------|---------------------------|
|------------|---------------------------|

#### Acute Toxicity

| <u>Route of Exposure</u>    | <u>Conclusion / Remarks</u>                                                                                   |
|-----------------------------|---------------------------------------------------------------------------------------------------------------|
| <b>INHALATION</b>           |                                                                                                               |
| Toxicity: LC50 > 5000 mg/m3 | Minimally Toxic. Based on assessment of the components.                                                       |
| Irritation: Data available. | Negligible hazard at ambient/normal handling temperatures.<br>Based on assessment of the components.          |
|                             |                                                                                                               |
| <b>INGESTION</b>            |                                                                                                               |
| Toxicity: LD50 > 2000 mg/kg | Minimally Toxic. Based on test data for structurally similar materials.                                       |
|                             |                                                                                                               |
| <b>Skin</b>                 |                                                                                                               |
| Toxicity: LD50 > 2000 mg/kg | Minimally Toxic. Based on test data for structurally similar materials.                                       |
| Irritation: Data available. | Negligible irritation to skin at ambient temperatures. Based on test data for structurally similar materials. |
|                             |                                                                                                               |
| <b>Eye</b>                  |                                                                                                               |
| Irritation: Data available. | May cause mild, short-lasting discomfort to eyes. Based on test data for structurally similar materials.      |

Additional information is available by request.

| SECTION 12 | ECOLOGICAL INFORMATION |
|------------|------------------------|
|------------|------------------------|

The information given is based on data available for the material, the components of the material, and similar materials.

#### ECOTOXICITY

Material -- Not expected to be harmful to aquatic organisms.

Product Name: MOBIL EAL ARCTIC 68

Revision Date: 28Aug2007

Page 6 of 8

#### MOBILITY

Majority of components -- Low solubility and floats and is expected to migrate from water to the land. Expected to partition to sediment and wastewater solids.

#### PERSISTENCE AND DEGRADABILITY

##### Biodegradation:

Majority of components -- Expected to be inherently biodegradable

#### ECOLOGICAL DATA

#### ECOTOXICITY

| Test                     | Duration   | Organism Type | Test Results |
|--------------------------|------------|---------------|--------------|
| Aquatic - Acute Toxicity | 96 hour(s) | Fish          | LL50 >5 g/l  |

#### SECTION 13

#### DISPOSAL CONSIDERATIONS

Disposal recommendations based on material as supplied. Disposal must be in accordance with current applicable laws and regulations, and material characteristics at time of disposal.

#### DISPOSAL RECOMMENDATIONS

Product is suitable for burning in an enclosed controlled burner for fuel value or disposal by supervised incineration at very high temperatures to prevent formation of undesirable combustion products.

#### REGULATORY DISPOSAL INFORMATION

**European Waste Code:** 13 01 11

NOTE: These codes are assigned based upon the most common uses for this material and may not reflect contaminants resulting from actual use. Waste producers need to assess the actual process used when generating the waste and its contaminants in order to assign the proper waste disposal code(s).

This material is considered as hazardous waste pursuant to Directive 91/689/EEC on hazardous waste, and subject to the provisions of that Directive unless Article 1(5) of that Directive applies.

**Empty Container Warning** Empty Container Warning (where applicable): Empty containers may contain residue and can be dangerous. Do not attempt to refill or clean containers without proper instructions. Empty drums should be completely drained and safely stored until appropriately reconditioned or disposed. Empty containers should be taken for recycling, recovery, or disposal through suitably qualified or licensed contractor and in accordance with governmental regulations. DO NOT PRESSURISE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION. THEY MAY EXPLODE AND CAUSE INJURY OR DEATH.

#### SECTION 14

#### TRANSPORT INFORMATION

**LAND (ADR/RID) :** Not Regulated for Land Transport

**INLAND WATERWAYS (ADNR) :** Not Regulated for Inland Waterways Transport

Product Name: MOBIL EAL ARCTIC 68

Revision Date: 28Aug2007

Page 7 of 8

**SEA (IMDG) :** Not Regulated for Sea Transport according to IMDG-Code

**AIR (IATA) :** Not Regulated for Air Transport

| SECTION 15 | REGULATORY INFORMATION |
|------------|------------------------|
|------------|------------------------|

**Material is not dangerous as defined by the EU Dangerous Substances/Preparations Directives.**

**EU LABELING:** Not regulated according to EC Directives

**REGULATORY STATUS AND APPLICABLE LAWS AND REGULATIONS**

**Complies with the following national/regional chemical inventory requirements: TSCA**  
**Special Cases:**

| Inventory | Status             |
|-----------|--------------------|
| ELINCS    | Restrictions Apply |
| IECSC     | Restrictions Apply |

| SECTION 16 | OTHER INFORMATION |
|------------|-------------------|
|------------|-------------------|

**N/D = Not determined, N/A = Not applicable**

**THIS SAFETY DATA SHEET CONTAINS THE FOLLOWING REVISIONS:**

Revision Changes:

Section 13: Disposal Considerations - Disposal Recommendations was modified.

Section 01: Product Code was modified.

Section 13: European Waste Codes was modified.

Section 13: Empty Container Warning was modified.

Section 09: Phys/Chem Properties Note was modified.

Section 09: Color was modified.

Section 09: Boiling Point °C(°F) was modified.

Section 09: Pour Point °C(°F) was modified.

Section 08: Hand Protection was modified.

Section 09: Vapour Pressure was modified.

Section 05: Hazardous Combustion Products was modified.

Section 06: Accidental Release - Spill Management - Water was modified.

Section 09: Relative Density - Header was modified.

Section 09: Flammable Limits - LEL was modified.

Section 09: Flash Point °C(°F) was modified.

Section 09: Viscosity was modified.

Section 09: Viscosity was modified.

Product Name: MOBIL EAL ARCTIC 68

Revision Date: 28Aug2007

Page 8 of 8

---

Section 09: Relative Density was modified.  
Section 16: MSN, MAT ID was modified.  
Section 15: Special Cases Table was modified.  
Section 09: Flammable Limits - UEL was modified.  
Section 01: Company Contact Methods Sorted by Priority was modified.  
Section 12: Mobility - Header was added.  
Section 12: Environmental tox table header was added.  
Section 12: Test - Column Header was added.  
Section 12: Organism Type - Column Header was added.  
Section 12: Duration - Column Header was added.  
Section 12: Test Results - Column Header was added.  
Section 08: Exposure limits/standards was added.  
Section 08: Exposure limits/standards - Header was added.  
Section 12: Ecological Information - Mobility was added.  
Section 12: Ecological Information - Mobility was added.  
Section 12: Ecological Information - Biodegradation was added.  
Section 12: Ecological Information - Biodegradation was added.  
Section 12: Environmental tox table in section 12 was added.  
Section 12: Ecological data - Header was added.  
Section 12: Ecological Information - Biodegradation was deleted.  
Section 12: Ecological Information - Biodegradation was deleted.

---

The information and recommendations contained herein are, to the best of ExxonMobil's knowledge and belief, accurate and reliable as of the date issued. You can contact ExxonMobil to insure that this document is the most current available from ExxonMobil. The information and recommendations are offered for the user's consideration and examination. It is the user's responsibility to satisfy itself that the product is suitable for the intended use. If buyer repackages this product, it is the user's responsibility to insure proper health, safety and other necessary information is included with and/or on the container. Appropriate warnings and safe-handling procedures should be provided to handlers and users. Alteration of this document is strictly prohibited. Except to the extent required by law, re-publication or retransmission of this document, in whole or in part, is not permitted. The term, "ExxonMobil" is used for convenience, and may include any one or more of ExxonMobil Chemical Company, Exxon Mobil Corporation, or any affiliates in which they directly or indirectly hold any interest.

---

Internal Use Only

MHC: 0, 0, 0, 0, 0, 0

PPEC: A

DGN: 2007362QGB (1013706)

---