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## SAFETY DATA SHEET

**SECTION 1****PRODUCT AND COMPANY IDENTIFICATION****PRODUCT**

**Product Name:** MOBILARMA 798  
**Product Description:** Base Oil and Additives  
**Product Code:** 201570401055, 667212-00, 970539  
**Intended Use:** Corrosion inhibitor

**COMPANY IDENTIFICATION**

**Supplier:** EXXON MOBIL CORPORATION  
3225 GALLOWS RD.  
FAIRFAX, VA. 22037 USA

**24 Hour Health Emergency** 609-737-4411  
**Transportation Emergency Phone** 800-424-9300 or 703-527-3887 CHEMTREC  
**Product Technical Information** 800-662-4525, 800-947-9147  
**MSDS Internet Address** <http://www.exxon.com>, <http://www.mobil.com>

**SECTION 2****HAZARDS IDENTIFICATION**

This material is hazardous according to regulatory guidelines (see (M)SDS Section 15).

**CLASSIFICATION:**

Skin Sensitizer: Category 1.

**LABEL:****Pictogram:**

**Signal Word:** Warning

**Hazard Statements:**

H317: May cause allergic skin reaction.

**Precautionary Statements:**

P261: Avoid breathing mist / vapours. P272: Contaminated work clothing should not be allowed out of the workplace. P280: Wear protective gloves. P302 + P352: IF ON SKIN: Wash with plenty of soap and water. P333 + P313: If skin irritation or rash occurs: Get medical advice/attention. P362 + P364: Take off contaminated clothing and wash it before reuse. P501: Dispose of contents and container in accordance with local regulations.

**Contains:** POLYAMINE

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**Other hazard information:**

**HAZARD NOT OTHERWISE CLASSIFIED (HNOC):** None as defined under 29 CFR 1900.1200.

**PHYSICAL / CHEMICAL HAZARDS**

Thermal burn hazard - contact with hot material may cause thermal burns.

**HEALTH HAZARDS**

Excessive exposure may result in eye, skin, or respiratory irritation. High-pressure injection under skin may cause serious damage. When heated, the vapors/fumes given off may cause respiratory tract irritation.

**ENVIRONMENTAL HAZARDS**

No significant hazards.

|                        |           |                 |               |
|------------------------|-----------|-----------------|---------------|
| <b>NFPA Hazard ID:</b> | Health: 2 | Flammability: 1 | Reactivity: 0 |
| <b>HMIS Hazard ID:</b> | Health: 2 | Flammability: 1 | Reactivity: 0 |

**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.

|                  |   |
|------------------|---|
| <b>SECTION 3</b> | <b>COMPOSITION / INFORMATION ON INGREDIENTS</b> |
|------------------|---|

This material is defined as a mixture.

**Hazardous Substance(s) or Complex Substance(s) required for disclosure**

| Name                   | CAS#        | Concentration* | GHS Hazard Codes                       |
|------------------------|-------------|----------------|--|
| GLYCOL ETHER           | 800962-5326 | 0.1 - < 1%     | None                                   |
| PROPRIETARY POLYAMINE  | 68411-90-5  | 0.1 - < 1%     | H302, H311, H332, H314(1B), H401, H411 |
| PROPRIETARY POLYAMINES | Polymer     | 0.1 - < 1%     | H314(1B), H317                         |

\* All concentrations are percent by weight unless material is a gas. Gas concentrations are in percent by volume.

As per paragraph (i) of 29 CFR 1910.1200, formulation is considered a trade secret and specific chemical identity and exact percentage (concentration) of composition may have been withheld. Specific chemical identity and exact percentage composition will be provided to health professionals, employees, or designated representatives in accordance with applicable provisions of paragraph (i).

|                  |                           |
|------------------|---------------------------|
| <b>SECTION 4</b> | <b>FIRST AID MEASURES</b> |
|------------------|---------------------------|

**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 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. Remove contaminated clothing. Launder contaminated clothing

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before reuse. If burned by contact with hot material, molten material adhering to skin should be cooled as quickly as possible with water, and see a physician for removal of adhering material and treatment of burn.

## EYE CONTACT

Flush thoroughly with water for at least 15 minutes. Get medical assistance.

## INGESTION

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

## SECTION 5 FIRE FIGHTING MEASURES

### 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 runoff from fire control or dilution from entering streams, sewers, or drinking water supply. Firefighters 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.

**Hazardous Combustion Products:** Aldehydes, Oxides of carbon, Wax fumes, Incomplete combustion products, Smoke, Fume, Sulfur oxides, Amine

### FLAMMABILITY PROPERTIES

**Flash Point [Method]:** >210°C (410°F) [ASTM D-92]

**Flammable Limits (Approximate volume % in air):** LEL: 0.9 UEL: 7.0

**Autoignition Temperature:** N/D

## SECTION 6 ACCIDENTAL RELEASE MEASURES

### NOTIFICATION PROCEDURES

In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations. US regulations require reporting releases of this material to the environment which exceed the applicable reportable quantity or oil spills which could reach any waterway including intermittent dry creeks. The National Response Center can be reached at (800)424-8802.

### PROTECTIVE MEASURES

Avoid contact with spilled material. See Section 5 for fire fighting information. See the Hazard Identification Section for Significant Hazards. See Section 4 for First Aid Advice. See Section 8 for advice on the minimum requirements for personal protective equipment. Additional protective measures may be necessary, depending on the specific circumstances and/or the expert judgment of the emergency responders.

For emergency responders: Respiratory protection: respiratory protection will be necessary only in special cases, e.g., formation of mists. Half-face or full-face respirator with filter(s) for dust/organic vapor or Self

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Contained Breathing Apparatus (SCBA) can be used depending on the size of spill and potential level of exposure. If the exposure cannot be completely characterized or an oxygen deficient atmosphere is possible or anticipated, SCBA is recommended. Work gloves that are resistant to hydrocarbons are recommended. Gloves made of polyvinyl acetate (PVA) are not water-resistant and are not suitable for emergency use. Chemical goggles are recommended if splashes or contact with eyes is possible. Small spills: normal antistatic work clothes are usually adequate. Large spills: full body suit of chemical resistant, antistatic material is recommended.

## SPILL MANAGEMENT

**Land Spill:** Stop leak if you can do it without risk. Recover by pumping or with suitable absorbent. If liquid is too viscous for pumping, scrape it up with shovels into a suitable container for recycle or disposal.

**Water Spill:** Stop leak if you can do it 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: Dike 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

Avoid contact with skin. When heated, the vapors/fumes given off may cause respiratory tract irritation. Prevent small spills and leakage to avoid slip hazard. Material can accumulate static charges which may cause an electrical spark (ignition source). When the material is handled in bulk, an electrical spark could ignite any flammable vapors from liquids or residues that may be present (e.g., during switch-loading operations). Use proper bonding and/or ground procedures. However, bonding and grounds may not eliminate the hazard from static accumulation. Consult local applicable standards for guidance. Additional references include American Petroleum Institute 2003 (Protection Against Ignitions Arising out of Static, Lightning and Stray Currents) or National Fire Protection Agency 77 (Recommended Practice on Static Electricity) or CENELEC CLC/TR 50404 (Electrostatics - Code of practice for the avoidance of hazards due to static electricity).

**Static Accumulator:** This material is a static accumulator.

### STORAGE

The container choice, for example storage vessel, may effect static accumulation and dissipation. Do not store in open or unlabelled containers.

## SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

### EXPOSURE LIMIT VALUES

Exposure limits/standards (Note: Exposure limits are not additive)

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| Substance Name | Form  | Limit / Standard |                     | NOTE | Source |
|----------------|-------|------------------|---------------------|------|--------|
| Wax fumes      | Fume. | TWA              | 2 mg/m <sup>3</sup> | N/A  | ACGIH  |

**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 (inhalable fraction), 5 mg/m<sup>3</sup> - OSHA PEL.

NOTE: Limits/standards shown for guidance only. Follow applicable regulations.

No biological limits allocated.

## ENGINEERING CONTROLS

The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Control measures to consider:

Adequate ventilation should be provided so that exposure limits are not exceeded.

## 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:

No special requirements under ordinary 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/vapor 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. Glove suitability and breakthrough time will differ depending on the specific use conditions. Contact the glove manufacturer for specific advice on glove selection and breakthrough times for your use conditions. Inspect and replace worn or damaged gloves. The types of gloves to be considered for this material include:

Chemical resistant gloves are recommended. If product is hot, thermally protective, chemical resistant gloves are recommended. If contact with forearms is likely, wear gauntlet style gloves.

**Eye Protection:** If contact with material may occur, safety glasses and face shield 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:

Chemical/oil resistant clothing is recommended. If product is hot, thermally protective, chemical resistant apron and long sleeves are recommended.

**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.

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## ENVIRONMENTAL CONTROLS

Comply with applicable environmental regulations limiting discharge to air, water and soil. Protect the environment by applying appropriate control measures to prevent or limit emissions.

## SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

**Note:** Physical and chemical properties are provided for safety, health and environmental considerations only and may not fully represent product specifications. Contact the Supplier for additional information.

### GENERAL INFORMATION

**Physical State:** Liquid

**Color:** Amber

**Odor:** Characteristic

**Odor Threshold:** N/D

### IMPORTANT HEALTH, SAFETY, AND ENVIRONMENTAL INFORMATION

**Relative Density (at 15 °C):** 0.88

**Flammability (Solid, Gas):** N/A

**Flash Point [Method]:** >210°C (410°F) [ASTM D-92]

**Flammable Limits (Approximate volume % in air):** LEL: 0.9 UEL: 7.0

**Autoignition Temperature:** N/D

**Boiling Point / Range:** > 316°C (600°F) [Estimated]

**Decomposition Temperature:** N/D

**Vapor Density (Air = 1):** > 2 at 101 kPa [Estimated]

**Vapor Pressure:** < 0.013 kPa (0.1 mm Hg) at 20 °C [Estimated]

**Evaporation Rate (n-butyl acetate = 1):** N/D

**pH:** N/A

**Log Pow (n-Octanol/Water Partition Coefficient):** > 3.5 [Estimated]

**Solubility in Water:** Negligible

**Viscosity:** [N/D at 40 °C] | 23.2 cSt (23.2 mm<sup>2</sup>/sec) at 100°C

**Oxidizing Properties:** See Hazards Identification Section.

### OTHER INFORMATION

**Freezing Point:** N/D

**Melting Point:** N/A

**DMSO Extract (mineral oil only), IP-346:** < 3 %wt

## SECTION 10 STABILITY AND REACTIVITY

**REACTIVITY:** See sub-sections below.

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

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

**MATERIALS TO AVOID:** Strong oxidizers

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

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**POSSIBILITY OF HAZARDOUS REACTIONS:** Hazardous polymerization will not occur.

|                   |                                  |
|-------------------|----------------------------------|
| <b>SECTION 11</b> | <b>TOXICOLOGICAL INFORMATION</b> |
|-------------------|----------------------------------|

**INFORMATION ON TOXICOLOGICAL EFFECTS**

| <b>Hazard Class</b>  | <b>Conclusion / Remarks</b>  |
|--|--|
| <b>Inhalation</b>  |  |
| Acute Toxicity: No end point data for material.                | Not determined. Based on assessment of the components.   |
| Irritation: No end point data for material.                    | Elevated temperatures or mechanical action may form vapors, mist, or fumes which may be irritating to the eyes, nose, throat, or lungs. Based on assessment of the components. |
| <b>Ingestion</b>   |  |
| Acute Toxicity: No end point data for material.                | Minimally Toxic. Based on assessment of the components.  |
| <b>Skin</b>  |  |
| Acute Toxicity: No end point data for material.                | Minimally Toxic. Based on assessment of the components.  |
| Skin Corrosion/Irritation: No end point data for material.     | Negligible irritation to skin at ambient temperatures. Based on assessment of the components.  |
| <b>Eye</b>   |  |
| Serious Eye Damage/Irritation: No end point data for material. | May cause mild, short-lasting discomfort to eyes. Based on assessment of the components.   |
| <b>Sensitization</b>   |  |
| Respiratory Sensitization: No end point data for material.     | Not expected to be a respiratory sensitizer. Based on assessment of the components.  |
| Skin Sensitization: No end point data for material.            | Contains a substance that may cause skin sensitization. Based on assessment of the components.   |
| <b>Aspiration:</b> Data available.                             | Not expected to be an aspiration hazard. Based on physico-chemical properties of the material.   |
| <b>Germ Cell Mutagenicity:</b> No end point data for material. | Not expected to be a germ cell mutagen. Based on assessment of the components.   |
| <b>Carcinogenicity:</b> No end point data for material.        | Not expected to cause cancer. Based on assessment of the components.   |
| <b>Reproductive Toxicity:</b> No end point data for material.  | Not expected to be a reproductive toxicant. Based on assessment of the components.   |
| <b>Lactation:</b> No end point data for material.              | Not expected to cause harm to breast-fed children.   |
| <b>Specific Target Organ Toxicity (STOT)</b>                   |  |
| Single Exposure: No end point data for material.               | Not expected to cause organ damage from a single exposure.   |
| Repeated Exposure: No end point data for material.             | Not expected to cause organ damage from prolonged or repeated exposure. Based on assessment of the components.   |

**OTHER INFORMATION**

**For the product itself:**

Elevated temperatures or mechanical action may form vapors, mists or fumes which may be irritating to the eyes and respiratory tract.

An ingredient or ingredients that are classified as a skin sensitizer.

**Contains:**

Base oil severely refined: Not carcinogenic in animal studies. Representative material passes IP-346, Modified Ames

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test, and/or other screening tests. Dermal and inhalation studies showed minimal effects; lung non-specific infiltration of immune cells, oil deposition and minimal granuloma formation. Not sensitizing in test animals.

The following ingredients are cited on the lists below: None.

--REGULATORY LISTS SEARCHED--

1 = NTP CARC

3 = IARC 1

5 = IARC 2B

2 = NTP SUS

4 = IARC 2A

6 = OSHA CARC

## 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.

### MOBILITY

Base oil component -- 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:

Base oil component -- Expected to be inherently biodegradable

### BIOACCUMULATION POTENTIAL

Base oil component -- Has the potential to bioaccumulate, however metabolism or physical properties may reduce the bioconcentration or limit bioavailability.

## 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

RCRA Information: The unused product, in our opinion, is not specifically listed by the EPA as a hazardous



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waste (40 CFR, Part 261D), nor is it formulated to contain materials which are listed as hazardous wastes. It does not exhibit the hazardous characteristics of ignitability, corrosivity or reactivity and is not formulated with contaminants as determined by the Toxicity Characteristic Leaching Procedure (TCLP). However, used product may be regulated.

**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.

|                   |                              |
|-------------------|------------------------------|
| <b>SECTION 14</b> | <b>TRANSPORT INFORMATION</b> |
|-------------------|------------------------------|

**LAND (DOT):** Not Regulated for Land Transport

**LAND (TDG):** Not Regulated for Land Transport

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

**Marine Pollutant:** No

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

|                   |                               |
|-------------------|-------------------------------|
| <b>SECTION 15</b> | <b>REGULATORY INFORMATION</b> |
|-------------------|-------------------------------|

**OSHA HAZARD COMMUNICATION STANDARD:** This material is considered hazardous in accordance with OSHA HazCom 2012, 29 CFR 1910.1200.

**Listed or exempt from listing/notification on the following chemical inventories:** AICS, IECSC, TSCA  
**Special Cases:**

| Inventory | Status             |
|-----------|--------------------|
| KECI      | Restrictions Apply |
| NDSL      | Restrictions Apply |

**EPCRA SECTION 302:** This material contains no extremely hazardous substances.

**SARA (311/312) REPORTABLE HAZARD CATEGORIES:** Immediate Health.

**SARA (313) TOXIC RELEASE INVENTORY:** This material contains no chemicals subject to the supplier notification requirements of the SARA 313 Toxic Release Program.

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The following ingredients are cited on the lists below: None.

--REGULATORY LISTS SEARCHED--

|               |                  |                   |             |
|---------------|------------------|-------------------|-------------|
| 1 = ACGIH ALL | 6 = TSCA 5a2     | 11 = CA P65 REPRO | 16 = MN RTK |
| 2 = ACGIH A1  | 7 = TSCA 5e      | 12 = CA RTK       | 17 = NJ RTK |
| 3 = ACGIH A2  | 8 = TSCA 6       | 13 = IL RTK       | 18 = PA RTK |
| 4 = OSHA Z    | 9 = TSCA 12b     | 14 = LA RTK       | 19 = RI RTK |
| 5 = TSCA 4    | 10 = CA P65 CARC | 15 = MI 293       |             |

Code key: CARC=Carcinogen; REPRO=Reproductive

**SECTION 16**

**OTHER INFORMATION**

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

**KEY TO THE H-CODES CONTAINED IN SECTION 3 OF THIS DOCUMENT (for information only):**

H302: Harmful if swallowed; Acute Tox Oral, Cat 4

H311: Toxic in contact with skin; Acute Tox Dermal, Cat 3

H314(1B): Causes severe skin burns and eye damage; Skin Corr/Irritation, Cat 1B

H317: May cause allergic skin reaction; Skin Sensitization, Cat 1

H332: Harmful if inhaled; Acute Tox Inh, Cat 4

H401: Toxic to aquatic life; Acute Env Tox, Cat 2

H411: Toxic to aquatic life with long lasting effects; Chronic Env Tox, Cat 2

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

Updates made in accordance with implementation of GHS requirements.

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Internal Use Only

MHC: 0B, 0B, 0, 0, 0, 1

PPEC: AH

DGN: 2010609XUS (1009119)



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