# MATERIAL SAFETY DATA SHEET

## SECTION 1  PRODUCT AND COMPANY IDENTIFICATION

### PRODUCT

<table>
<thead>
<tr>
<th>Product Name: SYNESSTIC 12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product Description: Synthetic Base Stocks</td>
</tr>
<tr>
<td>Product Code: 6019681-01</td>
</tr>
<tr>
<td>Intended Use: Base oil</td>
</tr>
</tbody>
</table>

### COMPANY IDENTIFICATION

<table>
<thead>
<tr>
<th>Supplier: EXXONMOBIL OIL CORPORATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>SYNTHETICS BUSINESS UNIT</td>
</tr>
<tr>
<td>13501 KATY FREEWAY</td>
</tr>
<tr>
<td>HOUSTON, TX. 77079 USA</td>
</tr>
</tbody>
</table>

24 Hour Health Emergency: 609-737-4411
Transportation Emergency Phone: 800-424-9300 202-483-7616
Product Technical Information: 732-321-6048

## SECTION 2  COMPOSITION / INFORMATION ON INGREDIENTS

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

## SECTION 3  HAZARDS IDENTIFICATION

This material is not considered to be hazardous according to regulatory guidelines (see (M)SDS Section 15).

### POTENTIAL HEALTH EFFECTS

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

### ENVIRONMENTAL HAZARDS

May cause long-term adverse effects in the aquatic environment.

<table>
<thead>
<tr>
<th>NFPA Hazard ID:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health: 0</td>
</tr>
<tr>
<td>Flammability: 1</td>
</tr>
<tr>
<td>Reactivity: 0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HMIS Hazard ID:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health: 0</td>
</tr>
<tr>
<td>Flammability: 1</td>
</tr>
<tr>
<td>Reactivity: 0</td>
</tr>
</tbody>
</table>

**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 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 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.

SECTION 5  FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA
Appropriate Extinguishing Media: Use water fog, foam, dry chemical or carbon dioxide (CO2) 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: Smoke, Fume, Oxides of carbon, Incomplete combustion products

FLAMMABILITY PROPERTIES
Flash Point [Method]: 219°C (426°F) [ ASTM D-93]
Flammable Limits (Approximate volume % in air): LEL: N/D UEL: N/D
Autoignition Temperature: 400°C (752°F)

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. U.S. regulations require reporting releases of this material to the environment which exceed the 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.

SPILL MANAGEMENT
Land Spill: Stop leak if you can do it without risk. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers. Recover by pumping or with suitable absorbent.
**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.

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**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.

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**SECTION 8  EXPOSURE CONTROLS / PERSONAL PROTECTION**

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

**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:

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/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. Work conditions can greatly effect 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
- Color: Amber
- Odor: Mild
- Odor Threshold: N/D

**IMPORTANT HEALTH, SAFETY, AND ENVIRONMENTAL INFORMATION**
- Relative Density (at 15 °C): 0.88
- Flash Point [Method]: 219°C (426°F) [ ASTM D-93]
- Flammable Limits (Approximate volume % in air): LEL: N/D UEL: N/D
- Autoignition Temperature: 400°C (752°F)
- Boiling Point / Range: 377°C (711°F)
- Vapor Density (Air = 1): N/D
- Vapor Pressure: [N/D at 20 °C ]
- Evaporation Rate (n-butyl acetate = 1): N/D
- pH: N/A
- Log Pow (n-Octanol/Water Partition Coefficient): > 6
- Solubility in Water: Negligible
- Viscosity: 114.7 cSt (114.7 mm²/sec) at 40°C | >12 cSt (12 mm²/sec) at 100°C
- Oxidizing Properties: See Sections 3, 15, 16.
OTHER INFORMATION
Freezing Point: N/D
Melting Point: N/A
Pour Point: -33°C (-27°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 oxidizers

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

HAZARDOUS POLYMERIZATION: Will not occur.

SECTION 11 TOXICOLOGICAL INFORMATION

ACUTE TOXICITY

<table>
<thead>
<tr>
<th>Route of Exposure</th>
<th>Conclusion / Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inhalation</td>
<td></td>
</tr>
<tr>
<td>Toxicity: No end point data.</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Irritation: No end point data.</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Ingestion</td>
<td></td>
</tr>
<tr>
<td>Toxicity (Rat): LD50 &gt; 5000 mg/kg</td>
<td>Minimally Toxic. Based on test data for the material.</td>
</tr>
<tr>
<td>Skin</td>
<td></td>
</tr>
<tr>
<td>Toxicity (Rabbit): LD50 &gt; 2000 mg/kg</td>
<td>Minimally Toxic. Based on test data for the material.</td>
</tr>
<tr>
<td>Irritation (Rabbit): Data available.</td>
<td>Negligible irritation to skin at ambient temperatures. Based on test data for the material.</td>
</tr>
<tr>
<td>Eye</td>
<td></td>
</tr>
<tr>
<td>Irritation (Rabbit): Data available.</td>
<td>May cause mild, short-lasting discomfort to eyes. Based on test data for the material.</td>
</tr>
</tbody>
</table>

Additional information is available by request.

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 -- May cause long-term adverse effects in the aquatic environment.

PERSISTENCE AND DEGRADABILITY
Biodegradation:
   Material -- Expected to biodegrade slowly.

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 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 PRECAUTIONARY LABEL TEXT: Empty containers may retain residue and can be dangerous. DO NOT PRESSURIZE, 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. Do not attempt to refill or clean container since residue is difficult to remove. Empty drums should be completely drained, properly bunged and promptly returned to a drum reconditioner. All containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations.

SECTION 14   TRANSPORT INFORMATION

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

AIR (IATA) : Not Regulated for Air Transport

SECTION 15   REGULATORY INFORMATION

OSHA HAZARD COMMUNICATION STANDARD: When used for its intended purposes, this material is not classified
as hazardous in accordance with OSHA 29 CFR 1910.1200.

NATIONAL CHEMICAL INVENTORY LISTING: AICS, ENCS, KECl, PICCS, TSCA

Special Cases:

<table>
<thead>
<tr>
<th>Inventory</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELINCS</td>
<td>Restrictions Apply</td>
</tr>
</tbody>
</table>

EPCRA: This material contains no extremely hazardous substances.

SARA (311/312) REPORTABLE HAZARD CATEGORIES: None.

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

The Following Ingredients are Cited on the Lists Below:

--REGULATORY LISTS SEARCHED--

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>ACGIH ALL</td>
</tr>
<tr>
<td>2</td>
<td>ACGIH A1</td>
</tr>
<tr>
<td>3</td>
<td>ACGIH A2</td>
</tr>
<tr>
<td>4</td>
<td>OSHA Z</td>
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<tr>
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<td>TSCA 6</td>
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<tr>
<td>9</td>
<td>TSCA 12b</td>
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<tr>
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<td>18</td>
<td>PA RTK</td>
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<tr>
<td>19</td>
<td>RI RTK</td>
</tr>
</tbody>
</table>

Code key: CARC=Carcinogen; REPRO=Reproductive

SECTION 16 OTHER INFORMATION

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

THIS SAFETY DATA SHEET CONTAINS THE FOLLOWING REVISIONS:

Revision Changes:
Section 01: Company Mailing Address was modified.
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Section 01: Company Mailing Address was modified.
Section 05: Hazardous Combustion Products was modified.
Section 12: Ecological Information - Acute Aquatic Toxicity was added.
Section 12: Ecological Information - Acute Aquatic Toxicity was added.
Section 15: Chemical Name - Header was deleted.
Section 15: CAS Number - Header was deleted.
Section 15: List Citations - Header was deleted.
Section 15: List Citations Table was deleted.
Section 12: Ecological Information - Acute Aquatic Toxicity was deleted.
Section 12: Ecological Information - Acute Aquatic Toxicity was deleted.

PRECAUTIONARY LABEL TEXT: Empty containers may retain residue and can be dangerous. DO NOT PRESSURIZE, 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. Do not attempt to refill or clean container since residue is difficult to remove. Empty drums should be
completely drained, properly bunged and promptly returned to a drum reconditioner. All containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations.

This warning is given to comply with California Health and Safety Code 25249.6 and does not constitute an admission or a waiver of rights. This product contains a chemical known to the State of California to cause cancer.

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DGN: 2028351CUS (541485)

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