SECTION 1: Identification of the substance/mixture and of the company/undertaking

Product information
Product Name : Synfluid® mPAO 100 cSt
Material : 1116564, 1106295, 1106303

Company : Chevron Phillips Chemical Company LP
10001 Six Pines Drive
The Woodlands, TX 77380

Emergency telephone:
Health:
866.442.9628 (North America)
1.832.813.4984 (International)

Transport:
CHEMTREC 800.424.9300 or 703.527.3887(int'l)
Asia: CHEMWATCH (+612 9186 1132) China: 0532 8388 9090
EUROPE: BIG +32.14.584545 (phone) or +32.14583516 (telefax)
Mexico CHEMTREC 01-800-681-9531 (24 hours)
South America SOS-Cotec Inside Brazil: 0800.111.767 Outside Brazil: +55.19.3467.1600
Argentina: +(54)-1159839431

Responsible Department : Product Safety and Toxicology Group
E-mail address : SDS@CPChem.com
Website : www.CPChem.com

SECTION 2: Hazards identification

Classification of the substance or mixture
This product has been classified in accordance with the hazard communication standard 29 CFR 1910.1200; the SDS and labels contain all the information as required by the standard.

Classification:
Not a hazardous substance or mixture.

Labeling:
Not a hazardous substance or mixture.
Carcinogenicity:

**IARC**
No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

**NTP**
No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

**ACGIH**
No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

### SECTION 3: Composition/information on ingredients

**Synonyms**: Polyalphaolefin; PAO

**Molecular formula**: Polymer

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS-No.</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-Octene Homopolymer, Hydrogenated</td>
<td>70693-43-5</td>
<td>100</td>
</tr>
</tbody>
</table>

Contains no hazardous ingredients according to GHS.

### SECTION 4: First aid measures

**General advice**: No hazards which require special first aid measures.

**If inhaled**: If unconscious, place in recovery position and seek medical advice. If symptoms persist, call a physician.

**In case of skin contact**: Wash off with soap and water. Wash contaminated clothing before re-use.

**In case of eye contact**: Flush eyes with water as a precaution. Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist.

**If swallowed**: Keep respiratory tract clear. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician.

### SECTION 5: Firefighting measures

**Flash point**: 255 °C (491 °F)

**Suitable extinguishing media**: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable extinguishing media**: High volume water jet.
Synfluid® mPAO 100 cSt

Specific hazards during firefighting: Exposure to decomposition products may be a hazard to health.

Special protective equipment for fire-fighters: Wear self-contained breathing apparatus for firefighting if necessary.

Further information: Standard procedure for chemical fires. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Fire and explosion protection: Normal measures for preventive fire protection.

Hazardous decomposition products: Carbon oxides.

SECTION 6: Accidental release measures

Personal precautions: Material can create slippery conditions.

Environmental precautions: Clean contaminated floors and objects thoroughly while observing environmental regulations.

Methods for cleaning up: Wipe up with absorbent material (e.g. cloth, fleece). Keep in suitable, closed containers for disposal.

SECTION 7: Handling and storage

Handling

Advice on safe handling: For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. Dispose of rinse water in accordance with local and national regulations.

Advice on protection against fire and explosion: Normal measures for preventive fire protection.

Storage

Requirements for storage areas and containers: Keep container tightly closed in a dry and well-ventilated place. Electrical installations / working materials must comply with the technological safety standards.

SECTION 8: Exposure controls/personal protection

Engineering measures

Adequate ventilation to control airborne concentrations below the exposure guidelines/limits. Consider the potential hazards of this material (see Section 2), applicable exposure limits, job activities, and other substances in the work place when designing engineering controls and selecting personal protective equipment. If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, the personal protective equipment listed below is recommended. The user should read and understand all instructions and limitations supplied with the equipment since protection is usually provided for a limited time or under certain circumstances.
Personal protective equipment

Respiratory protection: Wear a supplied-air NIOSH approved respirator unless ventilation or other engineering controls are adequate to maintain minimal oxygen content of 19.5% by volume under normal atmospheric pressure. Wear a NIOSH approved respirator that provides protection when working with this material if exposure to harmful levels of airborne material may occur, such as: Air-Purifying Respirator for Organic Vapors, Dusts and Mists. Use a positive pressure, air-supplying respirator if there is potential for uncontrolled release, exposure levels are not known, or other circumstances where air-purifying respirators may not provide adequate protection.

Hand protection: The suitability for a specific workplace should be discussed with the producers of the protective gloves. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.

Eye protection: Eye wash bottle with pure water. Tightly fitting safety goggles.

Skin and body protection: Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place. Wear as appropriate: Lightweight protective clothing.

Hygiene measures: General industrial hygiene practice. Prevent vapor buildup by providing adequate ventilation during and after use. Wash hands before breaks and at the end of workday.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

**Appearance**
- Form: Oil
- Physical state: Liquid
- Color: clear, light

**Safety data**
- Flash point: 255 °C (491 °F)
- Ignition temperature: 310 °C (590 °F)
- Lower explosion limit: No data available
- Upper explosion limit: No data available
- Thermal decomposition: No data available
- Molecular formula: Polymer

SDS Number:100000100031 4/11
Synfluid® mPAO 100 cSt

Molecular weight : Varies
pH : No data available
Freezing point : -44 °C (-47 °F)
Boiling point/boiling range : > 250 °C (> 482 °F)
Density : 0.84 g/cm³
Water solubility : Soluble in hydrocarbon solvents; insoluble in water.
Viscosity, kinematic : 1014 cSt at 40 °C (104 °F)

SECTION 10: Stability and reactivity

Reactivity : Stable at normal ambient temperature and pressure.

Chemical stability : This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

Possibility of hazardous reactions

Hazardous reactions : Further information: No decomposition if stored and applied as directed.
Conditions to avoid : No data available.
Materials to avoid : No data available.
Thermal decomposition : No data available
Hazardous decomposition products : Carbon oxides
Other data : No decomposition if stored and applied as directed.

SECTION 11: Toxicological information

Synfluid® mPAO 100 cSt
Acute oral toxicity : LD50: > 5,000 mg/kg
Species: Rat
Information given is based on data obtained from similar substances.

Synfluid® mPAO 100 cSt
SDS Number: 100000100031
**Acute inhalation toxicity**

LC50: > 5 mg/l  
Exposure time: 4 h  
Species: Rat  
Test atmosphere: dust/mist  
Information given is based on data obtained from similar substances.

**Acute dermal toxicity**

LD50: > 2,000 mg/kg  
Species: Rabbit  
Information given is based on data obtained from similar substances.

**Skin irritation**

No skin irritation

**Eye irritation**

No eye irritation

**Sensitization**

Did not cause sensitization on laboratory animals.

**Further information**

No data available.

**SECTION 12: Ecological information**

**Ecotoxicity effects**

**Toxicity to fish**

This material is not expected to be harmful to aquatic organisms.  
Information given is based on data obtained from similar substances.

**Toxicity to daphnia and other aquatic invertebrates**

This material is not expected to be harmful to aquatic organisms.  
Information given is based on data obtained from similar substances.

**Toxicity to algae**

This material is not expected to be harmful to aquatic organisms.  
Information given is based on data obtained from similar substances.

**Biodegradability**

This material is not expected to be readily biodegradable.

**Elimination information (persistence and degradability)**

**Mobility**

No data available
Synfluid® mPAO 100 cSt

Additional ecological information
Ecotoxicology Assessment
Short-term (acute) aquatic hazard: This material is not expected to be harmful to aquatic organisms.
Long-term (chronic) aquatic hazard: This material is not expected to be harmful to aquatic organisms.

SECTION 13: Disposal considerations

The information in this SDS pertains only to the product as shipped. Use material for its intended purpose or recycle if possible. This material, if it must be discarded, may meet the criteria of a hazardous waste as defined by US EPA under RCRA (40 CFR 261) or other State and local regulations. Measurement of certain physical properties and analysis for regulated components may be necessary to make a correct determination. If this material is classified as a hazardous waste, federal law requires disposal at a licensed hazardous waste disposal facility.

Product: Do not dispose of waste into sewer. Do not contaminate ponds, waterways or ditches with chemical or used container. Send to a licensed waste management company.

Contaminated packaging: Empty remaining contents. Dispose of as unused product. Do not re-use empty containers.

SECTION 14: Transport information

The shipping descriptions shown here are for bulk shipments only, and may not apply to shipments in non-bulk packages (see regulatory definition).

Consult the appropriate domestic or international mode-specific and quantity-specific Dangerous Goods Regulations for additional shipping description requirements (e.g., technical name or names, etc.) Therefore, the information shown here, may not always agree with the bill of lading shipping description for the material. Flashpoints for the material may vary slightly between the SDS and the bill of lading.

US DOT (UNITED STATES DEPARTMENT OF TRANSPORTATION)
NOT REGULATED AS A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR TRANSPORTATION BY THIS AGENCY.

IMO / IMDG (INTERNATIONAL MARITIME DANGEROUS GOODS)
NOT REGULATED AS A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR TRANSPORTATION BY THIS AGENCY.

IATA (INTERNATIONAL AIR TRANSPORT ASSOCIATION)
NOT REGULATED AS A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR TRANSPORTATION BY THIS AGENCY.

ADR (AGREEMENT ON DANGEROUS GOODS BY ROAD (EUROPE))
NOT REGULATED AS A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR
TRANSPORTATION BY THIS AGENCY.

RID (REGULATIONS CONCERNING THE INTERNATIONAL TRANSPORT OF DANGEROUS GOODS (EUROPE))
NOT REGULATED AS A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR TRANSPORTATION BY THIS AGENCY.

ADN (EUROPEAN AGREEMENT CONCERNING THE INTERNATIONAL CARRIAGE OF DANGEROUS GOODS BY INLAND WATERWAYS)
NOT REGULATED AS A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR TRANSPORTATION BY THIS AGENCY.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

SECTION 15: Regulatory information

National legislation

SARA 311/312 Hazards : No SARA Hazards

CERCLA Reportable Quantity : This material does not contain any components with a CERCLA RQ.

SARA 302 Reportable Quantity : This material does not contain any components with a SARA 302 RQ.

SARA 302 Threshold Planning Quantity : This material does not contain any components with a section 302 EHS TPQ.

SARA 304 Reportable Quantity : This material does not contain any components with a section 304 EHS RQ.

SARA 313 Components : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Clean Air Act
**SAFETY DATA SHEET**

**Synfluid® mPAO 100 cSt**

Version 2.2  
Revision Date 2019-11-04

<table>
<thead>
<tr>
<th>Ozone-Depletion Potential</th>
<th>This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).</th>
</tr>
</thead>
</table>

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate or Final VOC’s (40 CFR 60.489).

**US State Regulations**

**Pennsylvania Right To Know**  
1-Octene Homopolymer, Hydrogenated - 70693-43-5

**California Prop. 65 Components**  
This product, as shipped, does not contain any carcinogens or reproductive toxins presently known by the State of California to cause cancer or reproductive toxicity at a level of exposure subject to the requirements of California Proposition 65.

**Notification status**

**Europe REACH**  
This mixture contains only ingredients which have been registered according to Regulation (EU) No. 1907/2006 (REACH).

**Switzerland CH INV**  
On the inventory, or in compliance with the inventory

**United States of America (USA) TSCA**  
On or in compliance with the active portion of the TSCA inventory

**Canada DSL**  
All components of this product are on the Canadian DSL

**Australia AICS**  
On the inventory, or in compliance with the inventory

**New Zealand NZIoC**  
On the inventory, or in compliance with the inventory

**Japan ENCS**  
Not in compliance with the inventory

**Korea KECI**  
All substances in this product were registered, notified to be registered, or exempted from registration by CPChem through an Only Representative according to K-REACH regulations. Importation of this product is permitted if the Korean Importer of Record was included on CPChem’s notifications or if the Importer of Record themselves notified the substances.

**Philippines PICCS**  
On the inventory, or in compliance with the inventory

**China IECSC**  
This product contains one or more substances that have been notified under New Substances Notification
Further information

NSF H1 Registered, meets USDA 1998 H1 Guidelines

Significant changes since the last version are highlighted in the margin. This version replaces all previous versions.

The information in this SDS pertains only to the product as shipped.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

### Key or legend to abbreviations and acronyms used in the safety data sheet

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACGIH</td>
<td>American Conference of Government Industrial Hygienists</td>
</tr>
<tr>
<td>AICS</td>
<td>Australia, Inventory of Chemical Substances</td>
</tr>
<tr>
<td>DSL</td>
<td>Canada, Domestic Substances List</td>
</tr>
<tr>
<td>NDSL</td>
<td>Canada, Non-Domestic Substances List</td>
</tr>
<tr>
<td>CNS</td>
<td>Central Nervous System</td>
</tr>
<tr>
<td>CAS</td>
<td>Chemical Abstract Service</td>
</tr>
<tr>
<td>EC50</td>
<td>Effective Concentration</td>
</tr>
<tr>
<td>EC50</td>
<td>Effective Concentration 50%</td>
</tr>
<tr>
<td>EGEST</td>
<td>EOSCA Generic Exposure Scenario Tool</td>
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<tr>
<td>EOSCA</td>
<td>European Oilfield Specialty Chemicals Association</td>
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<tr>
<td>EINECS</td>
<td>European Inventory of Existing Chemical Substances</td>
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<tr>
<td>MAK</td>
<td>Germany Maximum Concentration Values</td>
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<tr>
<td>GHS</td>
<td>Globally Harmonized System</td>
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<tr>
<td>GHS</td>
<td>&gt; = Greater Than or Equal To</td>
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<tr>
<td>IC50</td>
<td>Inhibition Concentration 50%</td>
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<tr>
<td>IARC</td>
<td>International Agency for Research on Cancer</td>
</tr>
<tr>
<td>IECSC</td>
<td>Inventory of Existing Chemical</td>
</tr>
<tr>
<td>LD50</td>
<td>Lethal Dose 50%</td>
</tr>
<tr>
<td>LOAEL</td>
<td>Lowest Observed Adverse Effect Level</td>
</tr>
<tr>
<td>MAK</td>
<td>European Oilfield Specialty Chemicals Association</td>
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<tr>
<td>NIOSH</td>
<td>National Institute for Occupational Safety &amp; Health</td>
</tr>
<tr>
<td>NTP</td>
<td>National Toxicology Program</td>
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<tr>
<td>NZIoC</td>
<td>New Zealand Inventory of Chemicals</td>
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<td>NOAEL</td>
<td>No Observable Adverse Effect Level</td>
</tr>
<tr>
<td>NOEC</td>
<td>No Observed Effect Concentration</td>
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<tr>
<td>OSHA</td>
<td>Occupational Safety &amp; Health Administration</td>
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<tr>
<td>PEL</td>
<td>Permissible Exposure Limit</td>
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<td>PICCS</td>
<td>Philippines Inventory of Commercial Chemical Substances</td>
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<td>PRNT</td>
<td>Presumed Not Toxic</td>
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<tr>
<td>RCRA</td>
<td>Resource Conservation Recovery Act</td>
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<td>STEL</td>
<td>Short-term Exposure Limit</td>
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<td>SARA</td>
<td>Superfund Amendments and Reauthorization Act.</td>
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<tr>
<td>TLV</td>
<td>Threshold Limit Value</td>
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<tr>
<td>TWA</td>
<td>Time Weighted Average</td>
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<td></td>
<td>Substances in China</td>
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<td>ENCS</td>
<td>Japan, Inventory of Existing and New Chemical Substances</td>
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<td>Korea, Existing Chemical Inventory</td>
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<tr>
<td>&lt;=</td>
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<tr>
<td>LC50</td>
<td>Lethal Concentration 50%</td>
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