

**Synfluid® PAO 6 cSt HVI**

Version 1.6

Revision Date 2016-05-31

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

Product Name : Synfluid® PAO 6 cSt HVI  
Material : 10691074, 1113306, 1113305, 10691818

**EC-No.Registration number**

Chemical name	CAS-No. EC-No. Index No.	Legal Entity Registration number
1-Dodecene, Trimer, Hydrogenated	151006-62-1 417-070-7 601-064-00-8	Chevron Phillips Chemical Company LP 01-0000016388-62-0004
1-Dodecene, Homopolymer, Hydrogenated	151006-63-2	Chevron Phillips Chemical Company LP 01-0000018318-67-0002

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

**Local** : Chevron Phillips Chemicals International N.V.  
Airport Plaza (Stockholm Building)  
Leonardo Da Vincilaan 19  
1831 Diegem  
Belgium

SDS Requests: (800) 852-5530  
Technical Information: (832) 813-4862  
Responsible Party: Product Safety Group  
Email:sds@cpchem.com

**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: +800 CHEMCALL (+800 2436 2255) China:+86-21-22157316  
EUROPE: BIG +32.14.584545 (phone) or +32.14583516 (telefax)

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South America SOS-Cotec Inside Brazil: 0800.111.767 Outside Brazil: +55.19.3467.1600

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**  
**REGULATION (EC) No 1272/2008**

Chronic aquatic toxicity, Category 4      H413:  
 May cause long lasting harmful effects to aquatic life.

**Label elements****Labeling (REGULATION (EC) No 1272/2008)**

Hazard Statements : H413      May cause long lasting harmful effects to aquatic life.

Precautionary Statements : **Prevention:**  
 P273      Avoid release to the environment.  
**Disposal:**  
 P501      Dispose of contents/ container to an approved waste disposal plant.

**SECTION 3: Composition/information on ingredients**

Synonyms : PAO 6  
 Polyalphaolefin  
 PAO  
 PAO 6 cSt Blend

Molecular formula : UVCB

**Mixtures****Hazardous ingredients**

Chemical name	CAS-No. EC-No. Index No.	Classification (REGULATION (EC) No 1272/2008)	Concentration [wt%]
1-Dodecene, Trimer, Hydrogenated	151006-62-1 417-070-7 601-064-00-8	Aquatic Chronic 4; H413	50 - 80

For the full text of the H-Statements mentioned in this Section, see Section 16.

**SECTION 4: First aid measures**

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- 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 eye contact : Remove contact lenses. Protect unharmed eye. If eye irritation persists, consult a specialist.
- If swallowed : Keep respiratory tract clear. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician.

**SECTION 5: Firefighting measures**

- Flash point : 246 - 271 °C (475 - 520 °F)  
Method: Cleveland Open Cup
- Autoignition temperature : 351 °C (664 °F)
- 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.

**SECTION 6: Accidental release measures**

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

**Storage**

- Requirements for storage areas and containers : Electrical installations / working materials must comply with the technological safety standards.
- Advice on common storage : No materials to be especially mentioned.

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**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. 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.   |

**SECTION 9: Physical and chemical properties****Information on basic physical and chemical properties****Appearance**

- |                |             |
|----------------|-------------|
| Form           | : Liquid    |
| Physical state | : Liquid    |
| Color          | : Colorless |
| Odor           | : Odorless  |

**Safety data**

- |                       |   |
|-----------------------|---|
| Flash point           | : 246 - 271 °C (475 - 520 °F)<br>Method: Cleveland Open Cup |
| Lower explosion limit | : No data available   |

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Upper explosion limit	: No data available
Oxidizing properties	: no
Autoignition temperature	: 351 °C (664 °F)
Molecular formula	: UVCB
Molecular weight	: Not applicable
pH	: Not applicable
Pour point	: < -40 °C (< -40 °F)
Boiling point/boiling range	: > 260 °C (> 500 °F)
Vapor pressure	: No data available
Density	: 6,87 - 6,96 L/G
Water solubility	: Soluble in hydrocarbon solvents; insoluble in water.
Viscosity, kinematic	: 29,5 cSt at 40 °C (104 °F) Method: ASTM D 445
Relative vapor density	: No data available
Evaporation rate	: No data available

**SECTION 10: Stability and reactivity**

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

Conditions to avoid	: No data available.
Other data	: No decomposition if stored and applied as directed.

**SECTION 11: Toxicological information****Acute oral toxicity**

1-Dodecene, Trimer, Hydrogenated	: LD50 Oral: > 5.000 mg/kg Species: Rat
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**Acute inhalation toxicity**

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1-Dodecene, Trimer,  
Hydrogenated: LC50: >5.06milligram per literExposure time: 4 h  
Species: Rat  
Test atmosphere: dust/mist  
Test substance: yes**Acute dermal toxicity**1-Dodecene, Trimer,  
Hydrogenated: LD50 Dermal: >2000 milligram per kilogram  
Species: Rat  
Test substance: yes**Skin irritation**1-Dodecene, Trimer,  
Hydrogenated

: No skin irritation

**Eye irritation**1-Dodecene, Trimer,  
Hydrogenated

: No eye irritation

**Sensitization**1-Dodecene, Trimer,  
Hydrogenated: Classification: Did not cause sensitization on laboratory  
animals.  
Did not cause sensitization on laboratory animals.Classification: Did not cause sensitization on laboratory  
animals.  
Did not cause sensitization on laboratory animals.**Repeated dose toxicity**1-Dodecene, Trimer,  
Hydrogenated: Species: Rat  
Application Route: oral gavage  
Exposure time: 28 day  
NOEL: 1.000 mg/kg  
Test substance: yes  
Method: OECD Test Guideline 407Species: Rat  
Application Route: oral gavage  
Exposure time: 10 weeks  
NOEL: 1.000 mg/kg  
Test substance: yes  
Method: OCED Guideline 408**Synfluid® PAO 6 cSt HVI****Further information**

: No data available.

**SECTION 12: Ecological information****Toxicity to fish**1-Dodecene, Trimer,  
Hydrogenated: LC50: > 1.000 mg/l  
Exposure time: 96 h  
Species: Oncorhynchus mykiss (rainbow trout)

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The product has low solubility in the test medium. An aqueous dispersion was tested.

**Toxicity to daphnia and other aquatic invertebrates**

1-Dodecene, Trimer, Hydrogenated : EC50: > 1.000 mg/l  
Exposure time: 48 h  
Species: Daphnia magna (Water flea)  
The product has low solubility in the test medium. An aqueous dispersion was tested.

**Toxicity to algae**

1-Dodecene, Trimer, Hydrogenated : EC50: > 1.000 mg/l  
Species: Selenastrum capricornutum (algae)  
The product has low solubility in the test medium. An aqueous dispersion was tested.

**Ecotoxicology Assessment**

Results of PBT assessment : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Additional ecological information : No data available

**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.

Contaminated packaging : Empty containers should be taken to an approved waste handling site for recycling or disposal.

**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.

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**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****Chemical Safety Assessment**

**Ingredients** : 1-Dodecene,  
Trimer,  
Hydrogenated

**Chemical Safety Assessment**

1-Dodecene,  
Homopolymer,  
Hydrogenated

**Major Accident Hazard Legislation** : 96/82/EC Update:  
Not applicable



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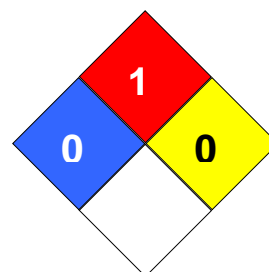
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**Notification status**

Europe REACH	:	This mixture contains only ingredients which have been registered according to Regulation (EU) No. 1907/2006 (REACH).
United States of America TSCA	:	On 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	:	On the inventory, or in compliance with the inventory
Korea KECI	:	On the inventory, or in compliance with the inventory
Philippines PICCS	:	On the inventory, or in compliance with the inventory
China IECSC	:	On the inventory, or in compliance with the inventory

**SECTION 16: Other information**

**NFPA Classification** : Health Hazard: 0  
Fire Hazard: 1  
Reactivity Hazard: 0

**Further information**

NSF H1, HX-1 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**

ACGIH	American Conference of Government Industrial Hygienists	LD50	Lethal Dose 50%
AICS	Australia, Inventory of Chemical Substances	LOAEL	Lowest Observed Adverse Effect Level
DSL	Canada, Domestic Substances List	NFPA	National Fire Protection Agency
NDSL	Canada, Non-Domestic Substances List	NIOSH	National Institute for Occupational Safety & Health
CNS	Central Nervous System	NTP	National Toxicology Program
CAS	Chemical Abstract Service	NZIoC	New Zealand Inventory of Chemicals
EC50	Effective Concentration	NOAEL	No Observable Adverse Effect Level
EC50	Effective Concentration 50%	NOEC	No Observed Effect Concentration
EGEST	EOSCA Generic Exposure Scenario Tool	OSHA	Occupational Safety & Health Administration

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EOSCA	European Oilfield Specialty Chemicals Association	PEL	Permissible Exposure Limit
EINECS	European Inventory of Existing Chemical Substances	PICCS	Philippines Inventory of Commercial Chemical Substances
MAK	Germany Maximum Concentration Values	PRNT	Presumed Not Toxic
GHS	Globally Harmonized System	RCRA	Resource Conservation Recovery Act
>=	Greater Than or Equal To	STEL	Short-term Exposure Limit
IC50	Inhibition Concentration 50%	SARA	Superfund Amendments and Reauthorization Act.
IARC	International Agency for Research on Cancer	TLV	Threshold Limit Value
IECSC	Inventory of Existing Chemical Substances in China	TWA	Time Weighted Average
ENCS	Japan, Inventory of Existing and New Chemical Substances	TSCA	Toxic Substance Control Act
KECI	Korea, Existing Chemical Inventory	UVCB	Unknown or Variable Composition, Complex Reaction Products, and Biological Materials
<=	Less Than or Equal To	WHMIS	Workplace Hazardous Materials Information System
LC50	Lethal Concentration 50%		

**Full text of H-Statements referred to under sections 2 and 3.**

H413

May cause long lasting harmful effects to aquatic life.