

**Synfluid® PAO 4 cSt**

Version 1.12

Revision Date 2017-06-22

according to GB/T 16483 and GB/T 17519

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

Product Name : Synfluid® PAO 4 cSt  
Material : 1111739, 1111738, 1111733, 1079673, 1079928, 1079872,  
1079835, 1079712, 1079702

Use : Synthetic Lubricants

**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**

**GHS Classification and Labeling: Follow GB 13690, GB 15258 and GB 30000.2 to GB 30000.29 (GHS 2011)**

**Emergency Overview****Danger**

**Form:** Liquid    **Physical state:** Liquid    **Color:** Clear, Colorless    **Odor:** Odorless

**Hazards** : May be fatal if swallowed and enters airways.

**Synfluid® PAO 4 cSt**

Version 1.12

Revision Date 2017-06-22

**Classification**

: Aspiration hazard, Category 1

**Labeling**

Symbol(s)

:



Signal Word

: Danger

Hazard Statements

: H304: May be fatal if swallowed and enters airways.

Precautionary Statements

**Response:**  
 P301 + P310: IF SWALLOWED: Immediately call a POISON CENTER/doctor.  
 P331: Do NOT induce vomiting.

**Storage:**  
 P405: Store locked up.

**Disposal:**  
 P501: Dispose of contents/ container to an approved waste disposal plant.

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

Synonyms

: Polyalphaolefin  
PAO

Molecular formula

: UVCB

Chemical name	CAS-No. / EINECS-No.	Concentration [wt%]
1-Decene, homopolymer, hydrogenated	68037-01-4	100

**SECTION 4: First aid measures**

General advice

: Move out of dangerous area. Show this material safety data sheet to the doctor in attendance. Material may produce a serious, potentially fatal pneumonia if swallowed or vomited.

If inhaled

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

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. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician. Take victim immediately to hospital.

**Synfluid® PAO 4 cSt**

Version 1.12

Revision Date 2017-06-22

**SECTION 5: Firefighting measures**

Flash point	: 219 °C (426 °F) Method: Cleveland Open Cup
Autoignition temperature	: 343 °C (649 °F)
Unsuitable extinguishing media	: High volume water jet.
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**

Personal precautions	: Use personal protective equipment. Ensure adequate ventilation.
Environmental precautions	: Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities.
Methods for cleaning up	: Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal.

**SECTION 7: Handling and storage****Handling**

Advice on safe handling	: Do not breathe vapors/dust. 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. Observe label precautions. Electrical installations / working materials must comply with the technological safety standards.
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**Synfluid® PAO 4 cSt**

Version 1.12

Revision Date 2017-06-22

**SECTION 8: Exposure controls/personal protection**

Not applicable

**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 Dusts and Mists / P100. 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:. Protective suit. Safety shoes.  |
| Hygiene measures         | : | When using do not eat or drink. When using do not smoke. 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           | : | Liquid           |
| Physical state | : | Liquid           |
| Color          | : | Clear, Colorless |
| Odor           | : | Odorless         |

**Safety data**

- |             |   |                 |
|-------------|---|-----------------|
| Flash point | : | 219 °C (426 °F) |
|-------------|---|-----------------|

**Synfluid® PAO 4 cSt**

Version 1.12

Revision Date 2017-06-22

Method: Cleveland Open Cup

Autoignition temperature	: 343 °C (649 °F)
Molecular formula	: UVCB
Boiling point/boiling range	: 414 °C (777 °F)
Vapor pressure	: 1.70 MMHG at 177 °C (351 °F)
Relative density	: 0.82 at 15.6 °C (60.1 °F)
Viscosity, kinematic	: 16 cSt at 37.8 °C (100.0 °F)
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**

<b>Synfluid® PAO 4 cSt</b> <b>Acute oral toxicity</b>	: LD50: > 5,000 mg/kg Species: Rat
<b>Synfluid® PAO 4 cSt</b> <b>Acute inhalation toxicity</b>	: LC50: > 5.2 mg/l Exposure time: 4 h Species: Rat Sex: male and female Test atmosphere: dust/mist
<b>Synfluid® PAO 4 cSt</b> <b>Acute dermal toxicity</b>	: LD50: > 2,000 mg/kg Species: Rat
<b>Synfluid® PAO 4 cSt</b> <b>Skin irritation</b>	: No skin irritation

**Synfluid® PAO 4 cSt**

Version 1.12

Revision Date 2017-06-22

**Synfluid® PAO 4 cSt****Eye irritation** : No eye irritation**Sensitization**

1-Decene, homopolymer, hydrogenated : Classification: Did not cause sensitization on laboratory animals.

**Synfluid® PAO 4 cSt****Aspiration toxicity** : May be fatal if swallowed and enters airways.  
Substances known to cause human aspiration toxicity hazards or to be regarded as if they cause human aspiration toxicity hazard.**CMR effects**1-Decene, homopolymer, hydrogenated : Carcinogenicity: Not classifiable as a human carcinogen.  
Mutagenicity: Animal testing did not show any mutagenic effects.  
Teratogenicity: Did not show teratogenic effects in animal experiments.  
Reproductive toxicity: No toxicity to reproduction**SECTION 12: Ecological information****Ecotoxicity effects****Toxicity to fish** : LC50: > 1,000 mg/l  
Exposure time: 96 h  
Species: Salmo gairdneri (Rainbow trout)  
  
LC50: > 750 mg/l  
Exposure time: 96 h  
Species: Pimephales promelas (fathead minnow)**Toxicity to daphnia and other aquatic invertebrates** : EC50: 190 mg/l  
Exposure time: 48 h  
Species: Daphnia magna (Water flea)**Toxicity to algae**1-Decene, homopolymer, hydrogenated : NOELR: 1,000 mg/l  
Exposure time: 72 h  
Species: Scenedesmus capricornutum (fresh water algae)  
static test Method: OECD Test Guideline 201**Bioaccumulation**

1-Decene, homopolymer, hydrogenated : This material is not expected to bioaccumulate.

**Synfluid® PAO 4 cSt**

Version 1.12

Revision Date 2017-06-22

**Biodegradability**

1-Decene, homopolymer, hydrogenated : Expected to be inherently biodegradable.

**Ecotoxicology Assessment****Results of PBT assessment**

1-Decene, homopolymer, hydrogenated : Non-classified PBT substance, Non-classified vPvB substance

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.

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))**

**Synfluid® PAO 4 cSt**

Version 1.12

Revision Date 2017-06-22

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**

**Notification status**

Europe REACH	:	On the inventory, or in compliance with the inventory
United States of America (USA) TSCA	:	On the inventory, or in compliance with the inventory
Canada DSL	:	On the inventory, or in compliance with the inventory
Australia AICS	:	On the inventory, or in compliance with the inventory
New Zealand NZIoC	:	On the inventory, or in compliance with the inventory
Notification number: HSR002606		
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**

**Further information**

Legacy SDS Number : 3332

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.

**Synfluid® PAO 4 cSt**

Version 1.12

Revision Date 2017-06-22

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
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%		