



## Synfluid® PAO 10 cSt

Version 1.12

Revision Date 2023-04-03

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 10 cSt  
 Material : 1125444, 1079875, 1079675

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  
 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  
 EUROPE: BIG +32.14.584545 (phone) or +32.14583516 (telefax)  
 Austria: VIZ +43 1 406 43 43 (24 hours/day, 7 days/week)  
 Belgium: 070 245 245 (24 hours/day, 7 days/week)  
 Bulgaria: +359 2 9154 233  
 Croatia: +3851 2348 342 (24 hours/day, 7 days/week)  
 Cyprus: 1401  
 Czech Republic: Toxicological Information Center +420 224 919 293, +420 224 915 402  
 Denmark: Danish Poison Center (Giftlinjen): +45 8212 1212  
 Estonia: BIG +32.14.584545 (phone) or +32.14583516 (telefax)  
 Finland: 0800 147 111 09 471 977 (24 hours/day)  
 France: ORFILA number (INRS): + 33 (0) 1 45 42 59 59 (24 hours/day, 7 days/week)  
 Germany: BIG +32.14.584545 (phone) or +32.14583516 (telefax)  
 Greece: (0030) 2107793777 (24 hours/day, 7 days/week)  
 Hungary: +36-80-201-199 (24 hours/day, 7 days/week)  
 Iceland: 543 2222 (24 hours/day, 7 days/week)  
 Ireland: BIG +32.14.584545 (phone) or +32.14583516 (telefax)  
 Italy: BIG +32.14.584545 (phone) or +32.14583516 (telefax)  
 Latvia: State Fire and Rescue Service, phone number: 112; Toxicology and Sepsis Clinic  
 Poisoning and Drug Information Center, Hipokrāta 2, Riga, Latvia, LV-1038, phone number +371  
 67042473. (24 hours.)

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Liechtenstein: BIG +32.14.584545 (phone) or +32.14583516 (telefax)  
 Lithuania: +370 (85) 2362052  
 Luxembourg: (+352) 8002 5500 (24 hours/day, 7 days/week)  
 Malta: +356 2395 2000  
 The Netherlands: NVIC: +31 (0)88 755 8000  
 Norway: 22 59 13 00 (24 hours/day, 7 days/week)  
 Poland: BIG +32.14.584545 (phone) or +32.14583516 (telefax)  
 Portugal: CIAV phone number: +351 800 250 250  
 Romania: +40213183606  
 Slovakia: +421 2 5477 4166  
 Slovenia: Phone number: 112  
 Spain: National Emergency Telephone Number of Spanish Poison Centre: +34 91 562 04 20 (24 hours/day, 7 days/week)  
 Sweden: 112 – ask for Poisons Information

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**

**Physical state:** liquid    **Color:** Clear, Colorless    **Odor:** Odorless

**Classification**

Not a hazardous substance or mixture.

**Labeling**

Not a hazardous substance or mixture.

**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                 |

Contains no hazardous ingredients according to GHS.

**SECTION 4: First aid measures**

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

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- 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 : 271°C (520°F)
- Autoignition temperature : 369°C (696°F)
- Suitable extinguishing media : Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
- 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 : Use personal protective equipment. Ensure adequate ventilation. Evacuate personnel to safe areas. Material can create slippery conditions.
- Environmental precautions : No special environmental precautions required.
- 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.

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**Storage**

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

**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 : If ventilation or other engineering controls are not adequate to maintain minimal oxygen content of 19.5% by volume under normal atmospheric pressure, a supplied-air NIOSH approved respirator may be appropriate.
- 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 according to the amount and concentration of the substance and the task performed at the work place. Appropriate PPE may include:. Lightweight protective clothing.
- Hygiene measures : General industrial hygiene practice.

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

- Physical state : liquid
- Color : Clear, Colorless
- Odor : Odorless
- Odor Threshold : No data available

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**Safety data**

|  |  |
|--|--|
| Flash point                            | : 271°C (520°F)  |
| Lower explosion limit                  | : Not applicable                                       |
| Upper explosion limit                  | : Not applicable                                       |
| Oxidizing properties                   | : no   |
| Autoignition temperature               | : 369°C (696°F)  |
| Molecular formula                      | : UVCB   |
| Molecular weight                       | : Varies   |
| pH                                     | : Not applicable                                       |
| Boiling point/boiling range            | : 430°C (806°F)  |
| Vapor pressure                         | : 0.10 MMHG<br>at 232°C (450°F)                        |
| Relative density                       | : 0.83<br>at 15.6 °C (60.1 °F)                         |
| Density                                | : 0.835 g/cm <sup>3</sup><br>at 15.6°C (60.1°F)        |
| Water solubility                       | : Soluble in hydrocarbon solvents; insoluble in water. |
| Partition coefficient: n-octanol/water | : No data available                                    |
| Viscosity, kinematic                   | : 60.3 cSt<br>at 40°C (104°F)                          |
| Relative vapor density                 | : 10<br>(Air = 1.0)                                    |
| Evaporation rate                       | : 3  |

**SECTION 10: Stability and reactivity**

|   |  |
|---|--|
| <b>Reactivity</b>                         | : Stable at normal ambient temperature and pressure.   |
| <b>Chemical stability</b>                 | : This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure. |
| <b>Possibility of hazardous reactions</b> |  |

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|   |  |
|---|--|
| <b>Hazardous reactions</b>              | : Further information: Stable under recommended storage conditions., No hazards to be specially mentioned. |
| <b>Conditions to avoid</b>              | : No data available.   |
| <b>Materials to avoid</b>               | : No data available.   |
| <b>Hazardous decomposition products</b> | : Carbon oxides  |
| <b>Other data</b>                       | : No decomposition if stored and applied as directed.  |

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

1-Decene Homopolymer Hydrogenated : LD50 Oral: > 5,000 mg/kg  
Species: Rat

**Acute inhalation toxicity**

1-Decene Homopolymer Hydrogenated : LC50: > 5.2 mg/l  
Exposure time: 4 h  
Species: Rat  
Test atmosphere: dust/mist

**Acute dermal toxicity**

1-Decene Homopolymer Hydrogenated : LD50: > 2,000 mg/kg  
Species: Rabbit

**Skin irritation**

1-Decene Homopolymer Hydrogenated : No skin irritation

**Eye irritation**

1-Decene Homopolymer Hydrogenated : No eye irritation

**Sensitization**

1-Decene Homopolymer Hydrogenated : Did not cause sensitization on laboratory animals.

**Repeated dose toxicity**

1-Decene Homopolymer Hydrogenated : Species: Rat  
Application Route: Oral  
Dose: 0, 8000, 20000, 50000 ppm  
Exposure time: 28 day  
Number of exposures: daily  
NOEL: 6,245 mg/kg  
Method: OECD Test Guideline 407

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Species: Rat  
 Application Route: oral gavage  
 Dose: 0, 1000, 7000, 50000 ppm  
 Exposure time: 13 weeks  
 Number of exposures: daily  
 NOEL: 4,159.4 mg/kg  
 Method: OCED Guideline 408

**Genotoxicity in vitro**

1-Decene Homopolymer Hydrogenated : Remarks: No adverse effects expected, Information given is based on data obtained from similar substances.

**Genotoxicity in vivo**

1-Decene Homopolymer Hydrogenated : Remarks: No adverse effects expected, Information given is based on data obtained from similar substances.

**Carcinogenicity**

1-Decene Homopolymer Hydrogenated : Remarks: This information is not available.

**Reproductive toxicity**

1-Decene Homopolymer Hydrogenated : Species: Rat  
 Sex: male and female  
 Application Route: oral gavage  
 Dose: 0, 100, 500, 1000 mg/kg  
 Number of exposures: daily  
 Test period: 10 weeks  
 Method: OECD Test Guideline 415  
 NOAEL Parent: 1,000 mg/kg

**Developmental Toxicity**

1-Decene Homopolymer Hydrogenated : Animal testing did not show any effects on fetal development. Information given is based on data obtained from similar substances.

**Aspiration toxicity**

1-Decene Homopolymer Hydrogenated : No aspiration toxicity classification.

**CMR effects**

1-Decene Homopolymer Hydrogenated : Carcinogenicity: Not classifiable as a human carcinogen.  
 Mutagenicity: Animal testing did not show any mutagenic effects.  
 Teratogenicity: no developmental effects  
 Reproductive toxicity: No toxicity to reproduction

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Further information**

: No data available.

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**SECTION 12: Ecological information****Ecotoxicity effects****Toxicity to fish**

1-Decene Homopolymer : LL50: > 1,000 mg/l  
 Hydrogenated : Exposure time: 96 h  
 Species: Oncorhynchus mykiss (rainbow trout)

**Toxicity to daphnia and other aquatic invertebrates**

1-Decene Homopolymer : EL50: > 1,000 mg/l  
 Hydrogenated : Exposure time: 48 h  
 Species: Daphnia magna (Water flea)  
 static test Method: OECD Test Guideline 202

**Toxicity to algae**

1-Decene Homopolymer : NOELR: 1,000 mg/l  
 Hydrogenated : Exposure time: 72 h  
 Species: Scenedesmus capricornutum (fresh water algae)  
 static test Method: OECD Test Guideline 201

**Biodegradability**

1-Decene Homopolymer : This material is not expected to be readily biodegradable.  
 Hydrogenated : Expected to be inherently biodegradable.

**Elimination information (persistence and degradability)****Bioaccumulation**

1-Decene Homopolymer : This material is not expected to bioaccumulate.  
 Hydrogenated

**Mobility** : No data available

**Results of PBT assessment**

1-Decene Homopolymer : Non-classified PBT substance, Non-classified vPvB substance  
 Hydrogenated

**Additional ecological information** : No data available

**Ecotoxicology Assessment****Short-term (acute) aquatic hazard**

1-Decene Homopolymer : This material is not expected to be harmful to aquatic  
 Hydrogenated organisms.

**Long-term (chronic) aquatic hazard**

1-Decene Homopolymer : This material is not expected to be harmful to aquatic  
 Hydrogenated organisms.



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**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.

**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.

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**Maritime transport in bulk according to IMO instruments****SECTION 15: Regulatory information****Notification status**

|                                     |   |   |
|-------------------------------------|---|---|
| Europe REACH                        | : | This product is in full compliance according to REACH regulation 1907/2006/EC.  |
| 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 AIIC                      | : | 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                          | : | 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   |
| Taiwan TCSI                         | : | 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**

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%                                     |
| AIIC  | Australian Inventory of Industrial Chemicals            | 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                            |

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|        |  |       |  |
|--------|--|-------|--|
|        |  |       | 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%                                 | ATE   | Acute toxicity estimate  |