Synfluid® PAO 9 cSt

Version 1.23 Revision Date 2026-10-23

MSDS number:AA00974-0000000108

Version	Revision Date:	SDS Number (Internal):	Date of last issue: 2026-10-23
1.23	2026-10-23	100000014080	Date of first issue: 2009-10-27

1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Synfluid® PAO 9 cSt

Product code : 000000000000000000 000000000000000000

Recommended use of the chemical and restrictions on use

Recommended use : Synthetic Lubricants

Restrictions on use : None known.
This material should not be used for purposes other than the identified uses in section 1 without expert advice.

Manufacturer or supplier's details

Company : CPC-Normal Alpha Olefin Dom Branch

Address : Lakeside Blvd 9500
Spring TX 77381-1205

Emergency telephone :

2. HAZARDS IDENTIFICATION

GHS Classification

Not a hazardous substance or mixture.

GHS label elements

Not a hazardous substance or mixture.

Additional Labeling

The following percentage of the mixture consists of ingredient(s) with unknown hazards to the aquatic environment: 99.99 %

Other hazards which do not result in classification

No data available

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components

Chemical name	Common Name	CAS-No.	Concentration (% w/w)
1-Dodecene, Trimer, Hydrogenated	branched hexatri-acontane	151006-62-1	>= 95 - <= 100
1-Dodecene, Homopolymer, Hydrogenated	1-Dodecene, homopolymer, hydrogenated	151006-63-2	>= 95 - <= 100

No hazardous ingredients
No hazardous ingredients

4. FIRST AID MEASURES

General advice	:	No hazards which require special first aid measures.
In case of eye contact	:	Remove contact lenses. Protect unharmed eye. If eye irritation persists, consult a specialist.
If inhaled	:	If unconscious, place in recovery position and seek medical advice. If symptoms persist, call a physician.
If swallowed	:	Keep respiratory tract clear. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician.
Most important symptoms and effects, both acute and delayed	:	No information available. No information available.
Notes to physician	:	Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable and unsuitable extinguishing media

Suitable extinguishing media	:	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Unsuitable extinguishing media	:	High volume water jet
Specific hazards during fire fighting	:	Do not use a solid water stream as it may scatter and spread fire. Cool closed containers exposed to fire with water spray.
Specific extinguishing methods	:	Standard procedure for chemical fires. Use extinguishing measures that are appropriate to local cir-

cumstances and the surrounding environment.

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

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	:	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 and materials for containment and cleaning up	:	Wipe up with absorbent material (e.g. cloth, fleece). Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Advice on protection against fire and explosion	:	Normal measures for preventive fire protection.
Advice on safe handling	:	For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area.
Conditions for safe storage	:	Electrical installations / working materials must comply with the technological safety standards.
Materials to avoid	:	No materials to be especially mentioned.
Further information on storage stability	:	No decomposition if stored and applied as directed.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Contains no substances with occupational exposure limit values.
Contains no substances with occupational exposure limit values.

Engineering measures	:	Adequate ventilation to control airborned 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.

Among the following personal protective equipment, the PPEs which require safety certification need to be certified by KOSHA.

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

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	liquid
Color	:	Colorless
Odor	:	Odorless
Odor Threshold	:	No data available
pH	:	Not applicable
Pour point	:	< -40 °C
Melting point/freezing point		No data available
Boiling point/boiling range	:	> 260 °C
Flash point	:	262 - 276 °C
		Method: Cleveland Open Cup
Evaporation rate	:	No data available
Self-ignition	:	351 °C
Upper explosion limit / Upper flammability limit	:	No data available
Lower explosion limit / Lower flammability limit	:	No data available
Vapor pressure	:	No data available
Solubility(ies)		
Water solubility	:	Soluble in hydrocarbon solvents; insoluble in water.
Relative vapor density	:	No data available
Density	:	6.87 - 6.96 L/G
Decomposition temperature	:	No data available
		No data available

Viscosity
Viscosity, kinematic : 53 cSt (40 °C)
Method: ASTM D 445

Oxidizing properties : no

Heat of combustion : 45.73 KJ/G

Molecular weight : Not applicable

10. STABILITY AND REACTIVITY

Chemical stability and possibility of hazardous reactions : Reactivity:
Stable at normal ambient temperature and pressure.
Chemical stability:
No decomposition if stored and applied as directed.
Possibility of hazardous reactions:
Stable under recommended storage conditions.
No hazards to be specially mentioned.

Conditions to avoid : No data available

Incompatible materials : No data available

Hazardous decomposition products : Carbon oxides

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure : No data available

Health hazard information

Acute toxicity

Product:

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg
Assessment: Not harmful
Remarks: Information given is based on data obtained from similar substances.

Acute inhalation toxicity : LC50 (Rat): > 5 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist

Assessment: 0 - Not toxic
Remarks: Information given is based on data obtained from similar substances.

Acute dermal toxicity : LD50 (Rat): > 2,000 mg/kg
Assessment: Not harmful
Remarks: Information given is based on data obtained from similar substances.

Components:

1-Dodecene, Trimer, Hydrogenated:

Acute oral toxicity : LD50 Oral (Rat): > 5,000 mg/kg
GLP: yes
Assessment: Not harmful

Acute inhalation toxicity : LC50 (Rat): >5.06 milligram per liter
Exposure time: 4 h
Test atmosphere: dust/mist
Test substance: yes
GLP: yes
Assessment: 0 - Not toxic

Acute dermal toxicity : LD50 Dermal (Rat): >2000 milligram per kilogram
Test substance: yes
GLP: yes
Assessment: Not harmful

Skin corrosion/irritation

Product:

Species : Rabbit
Result : No skin irritation
Remarks : Information given is based on data obtained from similar substances.

Components:

1-Dodecene, Trimer, Hydrogenated:

Species : Rabbit
Result : No skin irritation
GLP : yes
Test substance : yes

Serious eye damage/eye irritation

Product:

Species	:	Rabbit
Result	:	No eye irritation
Remarks	:	Information given is based on data obtained from similar substances.

Components:

1-Dodecene, Trimer, Hydrogenated:

Species	:	Rabbit
Result	:	No eye irritation
GLP	:	yes
Test substance	:	yes

Respiratory or skin sensitization

Skin sensitization

Did not cause sensitization on laboratory animals.

Product:

Result	:	No data available

Components:

1-Dodecene, Trimer, Hydrogenated:

Test Type	:	Buehler Test
Species	:	Guinea pig
Assessment	:	Did not cause sensitization on laboratory animals.
Result	:	Did not cause sensitization on laboratory animals.
GLP	:	yes
Test substance	:	yes

Test Type	:	Magnussen-Kligman Test
Species	:	Guinea pig
Assessment	:	Did not cause sensitization on laboratory animals.
Result	:	Did not cause sensitization on laboratory animals.
GLP	:	yes
Test substance	:	yes

Carcinogenicity

Product:

Carcinogenicity - Assessment	:	Contains no ingredient listed as a carcinogen

Germ cell mutagenicity

Product:

Genotoxicity in vitro	:	Test Type: Ames test Result: negative Remarks: Information refers to the main ingredient. Test Type: Chromosome aberration test in vitro Result: negative Remarks: Information refers to the main ingredient.
Genotoxicity in vivo	:	Test Type: Mouse micronucleus assay Result: negative Remarks: Information refers to the main ingredient.
Germ cell mutagenicity- Assessment	:	Animal testing did not show any mutagenic effects.

Components:

1-Dodecene, Trimer, Hydrogenated:

Genotoxicity in vitro	:	Test Type: Ames test Result: negative GLP: yes Test substance: yes Test Type: Chromosome aberration test in vitro Result: negative GLP: yes Test substance: yes
Genotoxicity in vivo	:	Test Type: Mouse micronucleus assay Species: Mouse Method: Mutagenicity (micronucleus test) Result: negative GLP: yes Test substance: yes

Reproductive toxicity

Product:

Reproductive toxicity - Assessment	:	No toxicity to reproduction Did not show teratogenic effects in animal experiments.

STOT-single exposure

Product:

Remarks	:	Not classified due to data which are conclusive although insufficient for classification.

STOT-repeated exposure

Product:

Remarks	:	Not classified due to data which are conclusive although insufficient for classification.

Repeated dose toxicity

Product:

Species	:	Rat, Male and female
NOAEL	:	1,000 mg/kg
Application Route	:	oral gavage
Exposure time	:	28 days
Dose	:	0, 1000 mg/kg/day
Method	:	OECD Test Guideline 407
GLP	:	yes
Remarks	:	Information given is based on data obtained from similar substances.

Components:

1-Dodecene, Trimer, Hydrogenated:

Species	:	Rat
NOAEL	:	1,000 mg/kg
Application Route	:	oral gavage
Exposure time	:	28 day
Method	:	OECD Test Guideline 407
Test substance	:	yes
GLP	:	yes

Species	:	Rat
NOAEL	:	1,000 mg/kg
Application Route	:	oral gavage
Exposure time	:	10 weeks
Method	:	OCED Guideline 408
Test substance	:	yes
GLP	:	yes

Aspiration toxicity

Product:

No aspiration toxicity classification

Experience with human exposure

No data available

Toxicology, Metabolism, Distribution

No data available

Neurological effects

No data available

Further information

Product:

Remarks : No data available

12. ECOLOGICAL INFORMATION

Ecotoxicity

Product:

Toxicity to fish :

Remarks: Not a hazardous substance or mixture.
Estimated based on individual component values.

Remarks: Not classified due to data which are conclusive although insufficient for classification.

Toxicity to daphnia and other aquatic invertebrates :

Remarks: Not a hazardous substance or mixture.

Estimated based on individual component values.

Remarks: Not classified due to data which are conclusive although insufficient for classification.

Toxicity to algae/aquatic plants : Remarks: Not a hazardous substance or mixture.
Estimated based on individual component values.

Remarks: Not classified due to data which are conclusive although insufficient for classification.

Ecotoxicology Assessment

Acute aquatic toxicity : This material is not expected to be harmful to aquatic organisms.

Chronic aquatic toxicity : This material is not expected to be harmful to aquatic organisms.

Further information

The following percentage of the mixture consists of ingredient(s) with unknown hazards to the aquatic environment: 99.99 %

Components:

1-Dodecene, Trimer, Hydrogenated:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): > 1,000 mg/l
Exposure time: 96 h
Remarks: The product has low solubility in the test medium.
An aqueous dispersion was tested.

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 1,000 mg/l
Exposure time: 48 h
Remarks: The product has low solubility in the test medium.
An aqueous dispersion was tested.

Toxicity to algae/aquatic plants : EC50 (Selenastrum capricornutum (algae)): > 1,000 mg/l
Remarks: The product has low solubility in the test medium.
An aqueous dispersion was tested.

Persistence and degradability

Product:

Biodegradability : Result: Expected to be inherently biodegradable.

Bioaccumulative potential

Product:

Bioaccumulation : Remarks: This material is not expected to bioaccumulate.

Mobility in soil

Product:

Mobility : Remarks: No data available

Other adverse effects

Product:

Additional ecological information : No data available

Endocrine disrupting properties

No data available

13. DISPOSAL CONSIDERATIONS

Disposal methods

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

Disposal precautions

Dispose of contents and container according to wastes control act.

14. TRANSPORT INFORMATION

International Regulations

Remarks : Polyolefin (molecular weight 300+), S.T. 2, Cat.Y

IATA-DGR

Not regulated as a dangerous good

UN/ID No. : Not applicable

Proper shipping name : Not applicable

Class	:	Not applicable
Subsidiary risk	:	Not applicable
Packing group	:	Not applicable
Labels	:	Not applicable
Packing instruction (cargo aircraft)	:	Not applicable
Packing instruction (passenger aircraft)	:	Not applicable
Remarks	:	Polyolefin (molecular weight 300+), S.T. 2, Cat.Y

IMDG-Code

Not regulated as a dangerous good

UN number	:	Not applicable
Proper shipping name	:	Not applicable
Class	:	Not applicable
Subsidiary risk	:	Not applicable
Packing group	:	Not applicable
Labels	:	Not applicable
EmS Code	:	Not applicable
Marine pollutant	:	no
Remarks	:	Polyolefin (molecular weight 300+), S.T. 2, Cat.Y

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

Not applicable

Domestic regulation

Refer to section 15 for specific national regulation.

Special precautions for user

Remarks	:	not regulated

15. REGULATORY INFORMATION

National regulatory information

Regulation under the Occupational Safety and Health Act

Harmful Substances Prohibited from Manufacturing

Not applicable

Harmful Substances Required Permission for Manufacture

Not applicable

Harmful Agents to be kept below Occupational Exposure Limits

Not applicable

Harmful Agents Required to be kept below Permission Levels
Not applicable

Hazardous substances requiring management
Not applicable

Special Management Materials
Not applicable

Controlled Substances Subject to Environment Monitoring
Not applicable

Controlled Substances Subject to Health Examination
Not applicable

Hazardous Substances Subject to Process Safety Management (PSM) Reporting Obligation
Not applicable

K-OSHA Hazardous Substances (Occupational Safety and Health Regulations, Table 1)
Not applicable

K-OSHA Hazardous Substances (Occupational Safety and Health Regulations, Table 9)
Not applicable

Regulation under the Chemicals Control Act

Chemicals of Acute and Chronic Hazard to Human Health and the Environment

Substances Acutely hazardous to humans
Not applicable

Substances Chronically hazardous to humans
Not applicable

Substances Hazardous to the environment
Not applicable

Accident Precaution Chemicals
Not applicable

Toxic Release Inventory
Not applicable

Act on Registration and Evaluation of Chemical Substances (K-REACH)

Restricted Chemicals
Not applicable

Prohibited Chemicals

Not applicable

Substances with Unconfirmed Hazards

Not applicable

Dangerous Substances Safety Management Act

Not Applicable to Dangerous Materials

Waste Control Act

Industrial general wastes
Follow article 13 of the act to dispose the product waste

Other requirements in domestic and other countries

The ingredients of this product are reported in the following inventories:

EU REACH	:	This product is in full compliance according to REACH regulation 1907/2006/EC.
CH INV	:	Not in compliance with the inventory
US TSCA	:	All substances listed as active on the TSCA inventory
CA. DSL	:	All components of this product are on the Canadian DSL
AU AIIC	:	All components are listed on the inventory, regulatory obligations/restrictions apply
NZ NZIoC	:	On the inventory, or in compliance with the inventory
JP ENCS	:	On the inventory, or in compliance with the inventory
JP ISHL	:	On the inventory, or in compliance with the inventory
KR 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.
PH PICCS	:	On the inventory, or in compliance with the inventory
CN IECSC	:	On the inventory, or in compliance with the inventory
TW TCSI	:	On the inventory, or in compliance with the inventory

16. OTHER INFORMATION

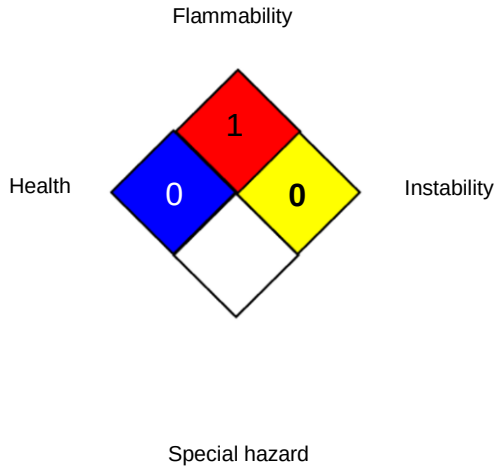
Further information

Issuing date : 2009-10-27

Revision number and date

Number of Revision : 1.23
Revision Date : 2026-10-23
Other information : NSF H1, HX-1 Registered, meets USDA 1998 H1 Guidelines
Date format : yyyy/mm/dd

NFPA:



Full text of other abbreviations

AIIC - Australian Inventory of Industrial Chemicals; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardization; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and

Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organization for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); LSPN - List of Hazardous Notified Substances (Chile); MARPOL - International Convention for the Prevention of Pollution from Ships; MERCOSUR - The Agreement for the Facilitation of the Transport of Dangerous Goods; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorization and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

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.

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