

**AlphaPlus® C24-28**

Version 1.8

Revision Date 2016-01-07

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

Product Name : AlphaPlus® C24-28  
Material : 1083881, 1037065, 1037066, 1037067, 1036986, 1037068

**Company** : Chevron Phillips Chemical Company LP  
Normal Alpha Olefins (NAO)  
10001 Six Pines Drive  
The Woodlands, TX 77380

**Emergency telephone:****Health:**

866.442.9628 (North America)

1.832.813.4984 (International)

**Transport:**

CHEMTREC 1.800.424.9300 (within USA and Canada) or 703.527.3887 (outside USA and Canada)

Asia: +800 CHEMCALL (+800 2436 2255) China: +86-21-22157316

EUROPE: BIG +32.14.584545 (phone) or +32.14583516 (telefax)

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**

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.

**Emergency Overview**

**Form:** Wax, Solid    **Physical state:** Solid    **Color:** White    **Odor:** No odor  
**OSHA Hazards** : No OSHA Hazards

**Classification**

:

Not a hazardous substance or mixture.

**Labeling**

**AlphaPlus® C24-28**

Version 1.8

Revision Date 2016-01-07

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 : C24-C28 Alpha Olefin Fraction  
NAO 24-28

Molecular formula : UVCB

Component	CAS-No.	Weight %
Alpha Olefin Fraction, C24-28	93924-11-9	100

Contains no hazardous ingredients according to GHS.

**SECTION 4: First aid measures**

General advice : Do not leave the victim unattended.

If inhaled : If symptoms persist, call a physician.  
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.  
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 : 218 °C (424 °F)  
Method: PMCC

Autoignition temperature : 249 °C (480 °F)

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

**AlphaPlus® C24-28**

Version 1.8

Revision Date 2016-01-07

- Further information : Standard procedure for chemical fires. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Fire and explosion protection : Provide appropriate exhaust ventilation at places where dust is formed.
- Hazardous decomposition products : Carbon oxides.

**SECTION 6: Accidental release measures**

- Personal precautions : Avoid dust formation.
- Methods for cleaning up : Pick up and arrange disposal without creating dust. Sweep up and shovel. 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 : Provide appropriate exhaust ventilation at places where dust is formed.

**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.

**SECTION 8: Exposure controls/personal protection****Personal protective equipment**

- Respiratory protection : No personal respiratory protective equipment normally required.
- Eye protection : Safety glasses.
- Skin and body protection : Protective suit.
- Hygiene measures : General industrial hygiene practice.

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

**AlphaPlus® C24-28**

Version 1.8

Revision Date 2016-01-07

Form : Wax, Solid  
Physical state : Solid  
Color : White  
Odor : No odor

**Safety data**

Flash point : 218 °C (424 °F)  
Method: PMCC

Lower explosion limit : No data available

Upper explosion limit : No data available

Oxidizing properties : no

Autoignition temperature : 249 °C (480 °F)

Molecular formula : UVCB

Molecular weight : Varies

pH : Not applicable

Melting point/range : 63 °C (145 °F)  
Method: ASTM D-87

Boiling point/boiling range : 390 - 430 °C (734 - 806 °F)

Vapor pressure : < 0.01 kPa  
at 65 °C (149 °F)

Relative density : 0.82  
at 15.6 °C (60.1 °F)

Density : 821 kg/m<sup>3</sup>  
at 15 °C (59 °F)  
  
799 kg/m<sup>3</sup>  
at 50 °C (122 °F)

Water solubility : Soluble in hydrocarbon solvents; insoluble in water.

Partition coefficient: n-octanol/water : No data available

Viscosity, kinematic : 2.5 cSt  
at 98.9 °C (210.0 °F)

Relative vapor density : 0.82  
at 15.6 °C (60.1 °F)

Evaporation rate : Not applicable

**SECTION 10: Stability and reactivity**

**AlphaPlus® C24-28**

Version 1.8

Revision Date 2016-01-07

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

**Possibility of hazardous reactions**

Conditions to avoid : No data available.

Materials to avoid : May react with oxygen and strong oxidizing agents, such as chlorates, nitrates, peroxides, etc.

Hazardous decomposition products : Carbon oxides

Other data : No decomposition if stored and applied as directed.

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

Alpha Olefin Fraction, C24-28 : LD50: >5000 mg/kg  
Species: Rat  
Information given is based on data obtained from similar substances.

LD50: > 2000 - < 5000 mg/kg  
Species: Rat  
Information given is based on data obtained from similar substances.

**Acute inhalation toxicity**

Alpha Olefin Fraction, C24-28 : LC50: > 2.1 mg/LExposure time: 4 h  
Species: Rat  
Sex: male and female  
Test atmosphere: vapor  
Method: OECD Test Guideline 403  
Information given is based on data obtained from similar substances.

LC50: 110.1 mg/LExposure time: 4 h  
Species: Rat  
Test atmosphere: vapor  
Method: OECD Test Guideline 403  
Information given is based on data obtained from similar substances.

LC50: > 8.5 mg/LExposure time: 1 h  
Species: Rat  
Test atmosphere: dust/mist  
Method: OECD Test Guideline 403  
Information given is based on data obtained from similar substances.

**Acute dermal toxicity**

**AlphaPlus® C24-28**

Version 1.8

Revision Date 2016-01-07

Alpha Olefin Fraction, C24-28 : LD50: > 2020 mg/kg  
Species: Rabbit  
Method: OECD Test Guideline 402  
Information given is based on data obtained from similar substances.

**Skin irritation**

Alpha Olefin Fraction, C24-28 : No skin irritation  
Information given is based on data obtained from similar substances.

**Eye irritation**

Alpha Olefin Fraction, C24-28 : No eye irritation  
Information given is based on data obtained from similar substances.

**Sensitization**

Alpha Olefin Fraction, C24-28 : Did not cause sensitization on laboratory animals.  
Information given is based on data obtained from similar substances.

**Repeated dose toxicity**

Alpha Olefin Fraction, C24-28 : Species: Rat, Male and female  
Sex: Male and female  
Application Route: oral gavage  
Dose: 100, 500, 1000 mg/kg/day  
Exposure time: 13 weeks  
Number of exposures: 7 d/wk  
NOEL: 1000 mg/kg bw/day

Species: Rat, Male and female  
Sex: Male and female  
Application Route: Inhalation  
Dose: 300, 1000, 3000 ppm  
Exposure time: 13 weeks  
Number of exposures: 6 hrs/d, 5 d/wk  
NOEL: 3000 ppm

**Reproductive toxicity**

Alpha Olefin Fraction, C24-28 : Species: Rat  
Sex: male and female  
Application Route: oral gavage  
Dose: 100, 500, 1000 mg/kg/day  
Number of exposures: Daily  
Test period: 41 to 55 days  
Method: OECD Guideline 421  
NOAEL Parent: 1000 mg/kg/day  
NOAEL F1: 1000 mg/kg/day

**AlphaPlus® C24-28**

Version 1.8

Revision Date 2016-01-07

Species: Rat  
 Sex: male and female  
 Application Route: oral gavage  
 Dose: 100, 500, 1000 mg/kg/day  
 Number of exposures: Daily  
 Test period: 42- 51 days  
 Method: OECD Guideline 422  
 NOAEL Parent: 1000 mg/kg/day  
 NOAEL F1: 1000 mg/kg/day

**AlphaPlus® C24-28**  
**Aspiration toxicity**

: No aspiration toxicity classification.

**CMR effects**

Alpha Olefin Fraction, C24-  
 28

: Carcinogenicity: Not classifiable as a human carcinogen.  
 Mutagenicity: Did not show mutagenic effects in animal experiments.  
 Teratogenicity: Did not show teratogenic effects in animal experiments.  
 Reproductive toxicity: No toxicity to reproduction

**AlphaPlus® C24-28**  
**Further information**

: No data available.

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

Alpha Olefin Fraction, C24-  
 28

: LL50: > 1000 mg/l  
 Exposure time: 96 h  
 Species: Oncorhynchus mykiss (rainbow trout)  
 Method: OECD Test Guideline 203  
 Information given is based on data obtained from similar substances.

**Toxicity to daphnia and other aquatic invertebrates**

Alpha Olefin Fraction, C24-  
 28

: EL100: 1000 mg/l  
 Exposure time: 48 h  
 Species: Daphnia magna (Water flea)  
 Method: OECD Test Guideline 202  
 Information given is based on data obtained from similar substances.

**Toxicity to algae**

Alpha Olefin Fraction, C24-  
 28

: EL50: >1000 mg/l  
 Exposure time: 72 h  
 Species: Selenastrum capricornutum (algae)  
 Method: OECD Test Guideline 201  
 Information given is based on data obtained from similar substances.

**AlphaPlus® C24-28**

Version 1.8

Revision Date 2016-01-07

**Bioaccumulation**

Alpha Olefin Fraction, C24-28 : This material is not expected to bioaccumulate.

**Biodegradability**

Alpha Olefin Fraction, C24-28 : This material is not expected to be readily biodegradable.

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

Alpha Olefin Fraction, C24-28 : Non-classified PBT substance, Non-classified vPvB substance

Additional ecological information : 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.

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.

When shipment is offered for transport above 100°C it is regulated as:

UN3257, ELEVATED TEMPERATURE LIQUID, N.O.S., (ALPHA OLEFIN FRACTION, C24-28), 9, III

**IMO / IMDG (INTERNATIONAL MARITIME DANGEROUS GOODS)**

NOT REGULATED AS A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR TRANSPORTATION BY THIS AGENCY.



**AlphaPlus® C24-28**

Version 1.8

Revision Date 2016-01-07

When shipment is offered for transport above 100°C it is regulated as:

UN3257, ELEVATED TEMPERATURE LIQUID, N.O.S.,(ALPHA OLEFIN FRACTION, C24-28), 9, III (218°C)

**IATA (INTERNATIONAL AIR TRANSPORT ASSOCIATION)**

NOT REGULATED AS A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR TRANSPORTATION BY THIS AGENCY.

When shipment is offered for transport above 100°C it is regulated as:

UN3257, 9: NOT PERMITTED FOR TRANSPORT

**ADR (AGREEMENT ON DANGEROUS GOODS BY ROAD (EUROPE))**

NOT REGULATED AS A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR TRANSPORTATION BY THIS AGENCY.

When shipment is offered for transport above 100°C it is regulated as:

UN3257, ELEVATED TEMPERATURE LIQUID, N.O.S.,(ALPHA OLEFIN FRACTION, C24-28), 9, III, (D)

**RID (REGULATIONS CONCERNING THE INTERNATIONAL TRANSPORT OF DANGEROUS GOODS (EUROPE))**

NOT REGULATED AS A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR TRANSPORTATION BY THIS AGENCY.

When shipment is offered for transport above 100°C it is regulated as:

UN3257, ELEVATED TEMPERATURE LIQUID, N.O.S.,(ALPHA OLEFIN FRACTION, C24-28), 9, III

**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.

When shipment is offered for transport above 100°C it is regulated as:

UN3257, ELEVATED TEMPERATURE LIQUID, N.O.S.,(ALPHA OLEFIN FRACTION, C24-28), 9, III

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

**SECTION 15: Regulatory information****National legislation**

**AlphaPlus® C24-28**

Version 1.8

Revision Date 2016-01-07

**SARA 311/312 Hazards** : No SARA Hazards**EPCRA - EMERGENCY PLANNING COMMUNITY RIGHT - TO - KNOW**

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 : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

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

SARA 313 Ingredients : 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**

Ozone-Depletion Potential : 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).

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 12 (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 SOCM I Intermediate or Final VOC's (40 CFR 60.489).

**US State Regulations**

Pennsylvania Right To Know : No components are subject to the Pennsylvania Right to Know Act.

**AlphaPlus® C24-28**

Version 1.8

Revision Date 2016-01-07

**New Jersey Right To Know**

: No components are subject to the New Jersey Right to Know Act.

**California Prop. 65  
Ingredients**

: This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

**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 TSCA**

: On the inventory, or in compliance with the inventory

**Canada DSL**

: On the inventory, or in compliance with the inventory

**Australia AICS**

: Not 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**

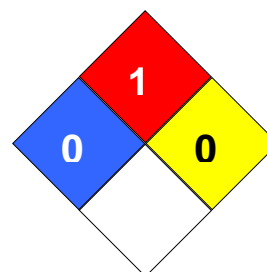
: On the inventory, or in compliance with the inventory

**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**

Legacy SDS Number : PE0027

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

**AlphaPlus® C24-28**

Version 1.8

Revision Date 2016-01-07

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%		