

AlphaPlus® 1-Octadecene

Version 2.7

Revision Date 2019-12-11

According to Regulation (EC) No. 1907/2006, Regulation (EC) No. 2015/830

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1****Product information**

Product Name : AlphaPlus® 1-Octadecene
Material : 1064095, 1037052, 1037053, 1036984, 1037051, 1037050

EC-No.Registration number

| Chemical name | CAS-No. EC-No. Index No. | Legal Entity Registration number |
|---------------|--------------------------------|---|
| 1-Octadecene | 112-88-9 204-012-9 | Chevron Phillips Chemical Company LP 01-2119474213-44-0001 |

1.2**Relevant identified uses of the substance or mixture and uses advised against**

Relevant Identified Uses : Manufacture
Supported
Distribution
Formulation
Use in Oil and Gas field drilling and production operations -
Industrial
Use in Oil and Gas field drilling and production operations –
Professional
Use in polymer production – industrial
Use as an intermediate
Use in coatings – industrial
Use in coatings – professional
Use in Coatings - Consumer
Use in mining – industrial

1.3**Details of the supplier of the safety data sheet**

Company : Chevron Phillips Chemical Company LP
Normal Alpha Olefins (NAO)
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

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Belgium

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

1.4**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**2.1**
Classification of the substance or mixture
REGULATION (EC) No 1272/2008

Aspiration hazard, Category 1

H304:

May be fatal if swallowed and enters airways.

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

Hazard pictograms :



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.
 Do NOT induce vomiting.
Storage:
 P405 Store locked up.
Disposal:
 P501 Dispose of contents/ container to an
 approved waste disposal plant.

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Hazardous ingredients which must be listed on the label:

- 112-88-9 1-Octadecene

Additional Labeling:

EUH066 Repeated exposure may cause skin dryness or cracking.

SECTION 3: Composition/information on ingredients**3.1 - 3.2****Substance or Mixture**

Synonyms : C18
NAO 18
Octadecene-1
C18H36

Molecular formula : C18H36

Hazardous ingredients

| Chemical name | CAS-No. EC-No. Index No. | Classification (REGULATION (EC) No 1272/2008) | Concentration [wt%] |
|---------------|--------------------------------|---|------------------------|
| 1-Octadecene | 112-88-9 204-012-9 | Asp. Tox. 1; H304 | 90 - 100 |

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

SECTION 4: First aid measures**4.1****Description of first-aid measures**

General advice : Move out of dangerous area. Show this material safety data sheet to the doctor in attendance. Symptoms of poisoning may appear several hours later. Do not leave the victim unattended.

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. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician. Take victim immediately to hospital.

SECTION 5: Firefighting measures

Flash point : 154°C (309°F)
Method: PMCC

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Autoignition temperature : 250°C (482°F)

5.1**Extinguishing media**

Unsuitable extinguishing media : High volume water jet.

5.2**Special hazards arising from the substance or mixture**

Specific hazards during fire fighting : Standard procedure for chemical fires. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

5.3**Advice for firefighters**

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 Dioxide. Carbon monoxide.

SECTION 6: Accidental release measures**6.1****Personal precautions, protective equipment and emergency procedures**

Personal precautions : Use personal protective equipment. Ensure adequate ventilation.

6.2**Environmental precautions**

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.

6.3**Methods and materials for containment and cleaning up**

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.

6.4**Reference to other sections**

Reference to other sections : For personal protection see section 8. For disposal considerations see section 13.

A quantitative risk assessment is not required for the environment.

A quantitative risk assessment is not required for human health.

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SECTION 7: Handling and storage**7.1****Precautions for safe handling
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.

7.2**Conditions for safe storage, including any incompatibilities****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.

SECTION 8: Exposure controls/personal protection**8.2****Exposure controls****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 Organic Vapors, Dusts and Mists. 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

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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.

A quantitative risk assessment is not required for the environment.
A quantitative risk assessment is not required for human health.

SECTION 9: Physical and chemical properties**9.1****Information on basic physical and chemical properties****Appearance**

Physical state : Liquid
Color : Colorless liquid or white solid

Safety data

Flash point : 154°C (309°F)
Method: PMCC

Lower explosion limit : 0,4 %(V)

Upper explosion limit : 6,9 %(V)

Oxidizing properties : no

Autoignition temperature : 250°C (482°F)

Molecular formula : C₁₈H₃₆

Molecular weight : 252,54 g/mol

pH : Not applicable

Pour point : No data available

Freezing point 17,5°C (63,5°F)

Boiling point/boiling range : 315°C (599°F)

Vapor pressure : 0,00 Pa
at 25°C (77°F)

< 0,01 kPa
at 65°C (149°F)

Relative density : 0,79
at 15,6 °C (60,1 °F)

Density : 792 kg/m³
at 15°C (59°F)

789 kg/m³
at 20°C (68°F)

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| | |
|--|--|
| | 768 kg/m ³ at 50°C (122°F) |
| Water solubility | : Soluble in hydrocarbon solvents; insoluble in water. |
| Partition coefficient: n-octanol/water | : No data available |
| Viscosity, kinematic | : 3,8 cSt at 37,8°C (100,0°F) |
| Relative vapor density | : 8,71 (Air = 1.0) |
| Evaporation rate | : No data available |

SECTION 10: Stability and reactivity**10.1**

Reactivity : Stable at normal ambient temperature and pressure.

10.2

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

10.3**Possibility of hazardous reactions**

Hazardous reactions : Hazardous reactions: Hazardous polymerization does not occur.

Further information: No decomposition if stored and applied as directed.

10.4

Conditions to avoid : No data available.

10.5

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

10.6

Hazardous decomposition products : Carbon Dioxide
Carbon monoxide

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

SECTION 11: Toxicological information**11.1****Information on toxicological effects**

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Acute oral toxicity

1-Octadecene : LD50: > 10.000 mg/kg
Species: Rat
Sex: male and female
Method: OECD Test Guideline 401
Test substance: no
Information given is based on data obtained from similar substances.

Acute inhalation toxicity

1-Octadecene : Not classified due to data which are conclusive although insufficient for classification.
Information given is based on data obtained from similar substances.

Skin irritation

1-Octadecene : No skin irritation
Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin resulting in desiccation of the skin.

Eye irritation

1-Octadecene : No eye irritation

Sensitization

1-Octadecene : Did not cause sensitization on laboratory animals.

Repeated dose toxicity

1-Octadecene : Species: rat (female)
Application Route: oral gavage
Dose: 0, 100, 500, 1000 mg/kg/d
NOEL: 1.000 mg/kg
Method: OECD Guideline 422
Information given is based on data obtained from similar substances.

Genotoxicity in vitro

1-Octadecene : Test Type: Ames test
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 471
Result: negative

Test Type: Chromosome aberration test in vitro
Test system: rodent hepatocytes
Method: OECD Test Guideline 473
Result: negative

Reproductive toxicity

1-Octadecene : Species: Rat

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Sex: male and female
 Application Route: oral gavage
 Dose: 0, 100, 500, 1000 mg/kg/d
 Method: OECD Guideline 421
 NOAEL Parent: 1.000 mg/kg
 NOAEL F1: 1.000 mg/kg
 Information given is based on data obtained from similar substances.

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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-Octadecene

: Carcinogenicity: Not available
 Mutagenicity: Tests on bacterial or mammalian cell cultures did not show mutagenic effects.
 Teratogenicity: Not available
 Reproductive toxicity: No toxicity to reproduction

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Further information

: Solvents may degrease the skin.

SECTION 12: Ecological information**12.1****Toxicity**

Ecotoxicity effects
Toxicity to fish

1-Octadecene

: LL50: > 1.000 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

1-Octadecene

: EL50: > 1.000 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

1-Octadecene

: EC50: > 1.000 mg/l
 Exposure time: 72 h
 Species: Raphidocellus subcapitata (algae)

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Method: OECD Test Guideline 201

Information given is based on data obtained from similar substances.

Toxicity to bacteria

1-Octadecene : NOEC: 3 mg/l
Exposure time: 120 h
Respiration inhibition

12.2**Persistence and degradability**

Biodegradability

1-Octadecene : This material is expected to be readily biodegradable.
Information given is based on data obtained from similar substances.

12.3**Bioaccumulative potential**

Elimination information (persistence and degradability)

12.4**Mobility in soil**

Mobility : No data available

12.5**Results of PBT and vPvB assessment**

Results of PBT assessment

1-Octadecene : Non-classified PBT substance, Non-classified vPvB substance

12.6**Other adverse effects**

Additional ecological information : No data available

Ecotoxicology Assessment

Short-term (acute) aquatic hazard : This material is not expected to be harmful to aquatic organisms.

Long-term (chronic) aquatic hazard : This material is not expected to be harmful to aquatic organisms.

SECTION 13: Disposal considerations**13.1****Waste treatment methods**

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.

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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.

A quantitative risk assessment is not required for the environment.

A quantitative risk assessment is not required for human health.

SECTION 14: Transport information**14.1 - 14.7****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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Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**SECTION 15: Regulatory information****15.1****Safety, health and environmental regulations/legislation specific for the substance or mixture**
National legislation

Commission Regulation (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

15.2**Chemical Safety Assessment**

Components : octadec-1-ene A Chemical Safety Assessment 204-012-9
has been carried out for this substance.

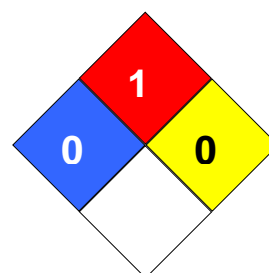
Major Accident Hazard Legislation : 96/82/EC Update: 2003
Directive 96/82/EC does not apply

Notification status

| | | |
|-------------------------------------|---|---|
| Europe REACH | : | On the inventory, or in compliance with the inventory |
| 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 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 | : | 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 |
| China IECSC | : | On the inventory, or in compliance with the inventory |
| Taiwan TCSI | : | On the inventory, or in compliance with the inventory |

SECTION 16: Other information

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



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Further information

Legacy SDS Number : PE0023

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 |
| 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.

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H304

May be fatal if swallowed and enters airways.