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

Product information
Product Name: AlphaPlus® C30+
Material: 1099704, 1037075, 1037072, 1037071

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 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
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.

Classification
Not a hazardous substance or mixture.

Labeling
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.

### SECTION 3: Composition/information on ingredients

| Synonyms                      | C30+ Alpha Olefin Fraction
|-------------------------------|-----------------------------
|                              | NAO C30+                    |
| Molecular formula             | Polymer                     |

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS-No.</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alkenes, C24-54 Branched &amp; Linear, Alpha</td>
<td>131459-42-2</td>
<td>100</td>
</tr>
</tbody>
</table>

Contains no hazardous ingredients according to GHS.

### SECTION 4: First aid measures

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

**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**
232 °C (450 °F)
Method: PMCC

**Autoignition temperature**
368 °C (694 °F)

**Suitable extinguishing media**
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**Specific hazards during firefighting**
Do not use a solid water stream as it may scatter and spread fire. Cool closed containers exposed to fire with water spray.

**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 : Provide appropriate exhaust ventilation at places where dust is formed.

SECTION 6: Accidental release measures

| Personal precautions | : Avoid dust formation. |
| Environmental precautions | : Local authorities should be advised if significant spillages cannot be contained. No special environmental precautions required. |
| 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

**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 /
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. Safety glasses.

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.

Hygiene measures: General industrial hygiene practice.

**SECTION 9: Physical and chemical properties**

**Information on basic physical and chemical properties**

**Appearance**
- Form: Wax, Solid
- Physical state: Solid
- Color: White

**Safety data**
- Flash point: 232 °C (450 °F)
  Method: PMCC
- Lower explosion limit: No data available
- Upper explosion limit: No data available
- Oxidizing properties: no
- Autoignition temperature: 368 °C (694 °F)
- Molecular formula: Polymer
- Molecular weight: Not applicable
- pH: Not applicable
- Pour point: No data available
- Boiling point/boiling range: Not applicable
- Vapor pressure: No data available
- Relative density: 0.79
  at 15.6 °C (60.1 °F)
Density: 0.8 g/cm³

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

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

Viscosity, kinematic: 9 cSt
   at 99 °C (210 °F)

Relative vapor density: Not applicable

Evaporation rate: 1

SECTION 10: Stability and reactivity

Reactivity: No decomposition if stored and applied as directed.

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

Possibility of hazardous reactions

Hazardous reactions: Further information: Stable under recommended storage conditions., No hazards to be specially mentioned.

Conditions to avoid: No data available.

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

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

SECTION 11: Toxicological information

AlphaPlus® C30+
Acute oral toxicity: LD50 Oral: > 2,000 mg/kg
   Species: Rat

AlphaPlus® C30+
Acute inhalation toxicity: No adverse effects expected

AlphaPlus® C30+
Acute dermal toxicity: LD50: > 2,000 mg/kg
   Species: Rat
   Information given is based on data obtained from similar substances.
**AlphaPlus® C30+**

<table>
<thead>
<tr>
<th>Property</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin irritation</td>
<td>No skin irritation. Information given is based on data obtained from similar substances.</td>
</tr>
<tr>
<td>Eye irritation</td>
<td>No eye irritation. Information given is based on data obtained from similar substances.</td>
</tr>
<tr>
<td>Sensitization</td>
<td>Did not cause sensitization on laboratory animals. Information given is based on data obtained from similar substances.</td>
</tr>
<tr>
<td>Repeated dose toxicity</td>
<td>Not classified due to data which are conclusive although insufficient for classification.</td>
</tr>
<tr>
<td>Genotoxicity in vitro</td>
<td>Remarks: Not classified due to data which are conclusive although insufficient for classification.</td>
</tr>
<tr>
<td>Genotoxicity in vivo</td>
<td>Remarks: Not classified due to data which are conclusive although insufficient for classification.</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>Remarks: No evidence of carcinogenicity</td>
</tr>
<tr>
<td>Reproductive toxicity</td>
<td>This information is not available.</td>
</tr>
<tr>
<td>Developmental Toxicity</td>
<td>This information is not available.</td>
</tr>
<tr>
<td>Further information</td>
<td>No data available.</td>
</tr>
</tbody>
</table>

### SECTION 12: Ecological information

**Ecotoxicity effects**

<table>
<thead>
<tr>
<th>Toxicity</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toxicity to fish</td>
<td>Aquatic toxicity is unlikely due to low solubility.</td>
</tr>
<tr>
<td>Toxicity to daphnia and other aquatic invertebrates</td>
<td>Aquatic toxicity is unlikely due to low solubility.</td>
</tr>
<tr>
<td>Toxicity to algae</td>
<td>Aquatic toxicity is unlikely due to low solubility.</td>
</tr>
</tbody>
</table>

| Biodegradability                  | Expected to be ultimately biodegradable                                      |
Elimination information (persistence and degradability)

Bioaccumulation : This material is not expected to bioaccumulate.

Mobility : No data available

Additional ecological information : This material is not expected to be harmful to aquatic organisms.

Ecotoxicology Assessment

Short-term (acute) aquatic hazard : This product has no known ecotoxicological effects.
Long-term (chronic) aquatic hazard : This product has no known ecotoxicological effects.

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, C30+) , 9, III

IMO / IMDG (INTERNATIONAL MARITIME DANGEROUS GOODS)

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, C30+) , 9, III (232°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, C30+) , 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, C30+) , 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, C30+) , 9, III

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

SECTION 15: Regulatory information

National legislation

SARA 311/312 Hazards : No SARA Hazards
**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**: This material does not contain any components with a section 302 EHS TPQ.

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

**SARA 313 Components**: 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 112 (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 SOCMI Intermediate or Final VOC’s (40 CFR 60.489).

**US State Regulations**

**Pennsylvania Right To Know**: Alkenes, C24-54 Branched & Linear, Alpha - 131459-42-2
California Prop. 65 Components: 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 product is in full compliance according to REACH regulation 1907/2006/EC.
Switzerland CH INV: Not 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: 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 KECl: A substance(s) in this product was not registered, notified to be registered, or exempted from registration by CPChem according to K-REACH regulations. Importation or manufacture of this product is still permitted provided the Korean Importer of Record has themselves notified the substance.

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

Further information

Legacy SDS Number: PE0028

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
| Acronym | Description | LD50 | LOAEL | NFPA | NIOSH | NTP | NZIoC | AICS | Australian Inventory of Chemical Substances | ACGIH | American Conference of Government Industrial Hygienists | CNS | Central Nervous System | DSL | Canada, Domestic Substances List | EC50 | Effective Concentration | EC50 | Effective Concentration 50% | ENCS | Europe, Inventory of Existing Chemical Substances | EINECS | European Inventory of Existing Chemical Substances | EOSCA | European Oilfield Specialty Chemicals Association | EPSCT | EOSCA Generic Exposure Scenario Tool | GHS | Globally Harmonized System | IC50 | Inhibition Concentration 50% | IARC | International Agency for Research on Cancer | IECSC | Inventory of Existing Chemical Substances in China | MAK | Germany Maximum Concentration Values | MAK | Germany Maximum Concentration Values | MAK | Germany Maximum Concentration Values | MAK | Germany Maximum Concentration Values | NDSL | Canada, Non-Domestic Substances List | NIOSH | National Institute for Occupational Safety & Health | NTP | National Toxicology Program | NZIoC | New Zealand Inventory of Chemicals | NRDC | Canada, Non-Domestic Substances List | OSHA | Occupational Safety & Health Administration | PEL | Permissible Exposure Limit | PEL | Permissible Exposure Limit | PICCS | Philippines Inventory of Commercial Chemical Substances | PRNT | Presumed Not Toxic | PRNT | Presumed Not Toxic | PRNT | Presumed Not Toxic | STEL | Short-term Exposure Limit | SARA | Superfund Amendments and Reauthorization Act | TLV | Threshold Limit Value | TWA | Time Weighted Average | TSCA | Toxic Substance Control Act | UVCB | Unknown or Variable Composition, Complex Reaction Products, and Biological Materials | WHMIS | Workplace Hazardous Materials Information System |