SAFETY DATA SHEET

AlphaPlus® C30+ HA

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

Product information

Product Name : AlphaPlus® C30+ HA
Material : 1107898, 1037074, 1036987, 1062782, 1037073

EC-No. Registration number

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS-No.</th>
<th>EC-No.</th>
<th>Legal Entity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethylene</td>
<td>74-85-1</td>
<td>200-815-3</td>
<td>Chevron Phillips Chemical Company LP</td>
</tr>
<tr>
<td></td>
<td></td>
<td>601-010-00-3</td>
<td></td>
</tr>
</tbody>
</table>

Company : Chevron Phillips Chemical Company LP
10001 Six Pines Drive
The Woodlands, TX 77380

Local : Chevron Phillips Chemicals International N.V.
Airport Plaza (Stockholm Building)
Leonardo Da Vinci alan 19
1831 Diegem
Belgium

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

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: +800 CHEMCALL (+800 2436 2255) China: +86-21-22157316
EUROPE: BIG +32.14.584545 (phone) or +32.14583516 (telex)
South America SOS-Cotec Inside Brazil: 0800.111.767 Outside Brazil: +55.19.3467.1600

Responsible Department : Product Safety and Toxicology Group
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Version 1.10

Revision Date 2016-06-16

E-mail address : SDS@CPChem.com
Website : www.CPChem.com

SECTION 2: Hazards identification

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

Not a hazardous substance or mixture.

Label elements
Labeling (REGULATION (EC) No 1272/2008)
Not a hazardous substance or mixture.

SECTION 3: Composition/information on ingredients

Synonyms : NAO C30+ HA
Molecular formula : Polymer

Mixtures

Hazardous ingredients

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS-No. EC-No.</th>
<th>Classification (REGULATION (EC) No 1272/2008)</th>
<th>Concentration [wt%]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethene, Homopolymer, Distn. Residues</td>
<td>260255-62-7</td>
<td></td>
<td>100</td>
</tr>
</tbody>
</table>

Contains no hazardous ingredients according to GHS.

SECTION 4: First aid measures

General advice : 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 skin contact : Wash off immediately with plenty of water for at least 15 minutes.
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 : Induce vomiting immediately and 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.

SDS Number:100000066170
SECTION 5: Firefighting measures

Flash point: 232 °C (450 °F)
Method: PMCC

Autoignition temperature: 391 °C (736 °F)

Unsuitable extinguishing media: High volume water jet.

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.

Hazardous decomposition products: No data available.

SECTION 6: Accidental release measures

Personal precautions: Avoid dust formation. Avoid breathing dust.

Environmental precautions: Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities.

Methods for cleaning up: 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. Dispose of rinse water in accordance with local and national regulations.

Advice on protection against fire and explosion: Provide appropriate exhaust ventilation at places where dust is formed.

Storage

Requirements for storage areas and containers: Keep container tightly closed in a dry and well-ventilated place. Electrical installations / working materials must comply with the technological safety standards.
**SECTION 8: Exposure controls/personal protection**

**Engineering measures**
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 NIOSH approved respirator that provides protection when working with this material if exposure to harmful levels of airborne material may occur, such as:

**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 dangerous substance at the work place. Wear as appropriate:

**Hygiene measures**: When using do not eat or drink. When using do not smoke. Wash hands before breaks and at the end of workday.

**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
- **Autoignition temperature**: 391 °C (736 °F)
- **Molecular formula**: Polymer
- **Molecular weight**: No data available
**SECTION 10: Stability and reactivity**

**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**: No data available
- **Other data**: No decomposition if stored normally.

**SECTION 11: Toxicological information**

**AlphaPlus® C30+ HA**
- **Acute oral toxicity**: LD50: > 2.0 g/kg  
  Species: Rat  
  Sex: Not Specified

**AlphaPlus® C30+ HA**
- **Acute inhalation toxicity**: LC50: not known
**AlphaPlus® C30+ HA**

**Acute dermal toxicity**: LD50: PNT

**AlphaPlus® C30+ HA**

**Aspiration toxicity**: No aspiration toxicity classification.

### SECTION 12: Ecological information

Elimination information (persistence and degradability)

- **Biodegradability**: This material is not expected to be readily biodegradable.

**Ecotoxicology Assessment**

- **Acute aquatic toxicity**: 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.

- **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.

### 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+ HA), 9, III

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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+ HA), 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+ HA), 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+ HA), 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+ HA), 9, III

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
SECTION 15: Regulatory information

National legislation
Chemical Safety Assessment
Ingredients: ethylene 200-815-3

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

Water contaminating class: nwg not water endangering

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 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: Exemptions from the obligation to register
Japan ENCS: On the inventory, or in compliance with the inventory
Notification number: (2)-27
Korea KECI: On the inventory, or in compliance with the inventory
Philippines PICCS: Not 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: CPC00027

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.
<table>
<thead>
<tr>
<th>Key or legend to abbreviations and acronyms used in the safety data sheet</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ACGIH</td>
<td>American Conference of Government Industrial Hygienists</td>
</tr>
<tr>
<td>LOAEL</td>
<td>Lowest Observed Adverse Effect Level</td>
</tr>
</tbody>
</table>
| LD50 | Lethal Dose 50%
| AICS | Australia, Inventory of Chemical Substances |
| NFPA | National Fire Protection Agency |
| NIOSH | National Institute for Occupational Safety & Health |
| CNS | Central Nervous System |
| NTP | National Toxicology Program |
| CAS | Chemical Abstract Service |
| EC50 | Effective Concentration |
| NOAEL | No Observable Adverse Effect Level |
| EC50 | Effective Concentration 50% |
| NOEL | No Observed Effect Level |
| 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% |