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

Product information

Product Name : AlphaPlus® C20-24 IS
Material : 1105793, 1105751

Use : Chemical intermediate

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:
North America: CHEMTREC 800.424.9300 or 703.527.3887
Asia: +800 CHEM CALL (+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

Danger
Physical state: Liquid  Color: Clear, colorless to light yellow
OSHA Hazards : Aspiration hazard

Classification
: Aspiration hazard, Category 1

Labeling
SAFETY DATA SHEET

AlphaPlus® C20-24 IS

Symbol(s) : 

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 or doctor/physician.
P331 Do NOT induce vomiting.

Storage:
P405 Store locked up.

Disposal:
P501 Dispose of contents/container to an approved waste disposal plant.

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 : C20-24 ISA, Isomerized Alpha Olefin C20-24, Isomerized Alpha Olefin C20-24IS

Molecular formula : Mixture

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<th>Component</th>
<th>CAS-No.</th>
<th>Weight %</th>
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<tr>
<td>Eicosene</td>
<td>27400-78-8</td>
<td>35 - 55</td>
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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.

MSDS Number:100000015017 2/10
SECTION 5: Firefighting measures

- **Flash point**: 185 °C (365 °F)
- **Autoignition temperature**: 240 °C (464 °F)
- **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.

SECTION 6: Accidental release measures

- **Methods for cleaning up**: Wipe up with absorbent material (e.g. cloth, fleece). 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.

**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
### 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 specific work-place.

### Hygiene measures
General industrial hygiene practice.

### SECTION 9: Physical and chemical properties

#### Information on basic physical and chemical properties

**Appearance**
- **Physical state**: Liquid
- **Color**: Clear, colorless to light yellow

**Safety data**
- **Flash point**: 185 °C (365 °F)
- **Lower explosion limit**: No data available
- **Upper explosion limit**: No data available
- **Oxidizing properties**: no
- **Autoignition temperature**: 240 °C (464 °F)
- **Molecular formula**: Mixture
- **Molecular weight**: Not applicable
- **pH**: No data available
- **Freezing point**: < 20 °C (< 68 °F)
- **Boiling point/boiling range**: 335 °C (635 °F)
- **Vapor pressure**: 0.01 MMHG at 100 °C (212 °F)
- **Relative density**: 0.803 at 15.6 °C (60.1 °F)
AlphaPlus® C20-24 IS

Density: 0.8 G/ML
Water solubility: No data available
Partition coefficient: n-octanol/water: No data available
Viscosity, kinematic: 8.926 cSt at 25 °C (77 °F)
                        6.184 cSt at 40 °C (104 °F)
                        2.168 cSt at 100 °C (212 °F)
Relative vapor density: No data available
Evaporation rate: 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.
Other data: No decomposition if stored and applied as directed.

SECTION 11: Toxicological information

AlphaPlus® C20-24 IS
Acute oral toxicity: LD50 Oral: > 5,000 mg/kg
                     Species: Rat
                     Information given is based on data obtained from similar substances.

AlphaPlus® C20-24 IS
Acute inhalation toxicity: No data available

AlphaPlus® C20-24 IS
Acute dermal toxicity: LD50 Dermal: > 2,000 mg/kg
                      Species: Rabbit
                      Information given is based on data obtained from similar substances.

AlphaPlus® C20-24 IS
Skin irritation: No skin irritation. Information given is based on data obtained
**AlphaPlus® C20-24 IS**

**Eye irritation**
- No eye irritation. Information given is based on data obtained from similar substances.

**Sensitization**
- Did not cause sensitization on laboratory animals. Information given is based on data obtained from similar substances.

**Aspiration toxicity**
- The substance or mixture is known to cause human aspiration toxicity hazards or has to be regarded as if it causes a human aspiration toxicity hazard.

**Toxicology Assessment**

**CMR effects**
- Carcinogenicity: Not classifiable as a human carcinogen.
- Mutagenicity: Contains no ingredient listed as a mutagen
- Teratogenicity: No evidence of adverse effects on sexual function and fertility, or on development, based on animal experiments.
- Reproductive toxicity: Weight of evidence does not support classification for reproductive toxicity

**Further information**
- No data available.

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**SECTION 12: Ecological information**

**Ecotoxicity effects**

**Toxicity to fish**
- No toxicity at the limit of solubility. Information given is based on data obtained from similar substances.

**Toxicity to daphnia and other aquatic invertebrates**
- No toxicity at the limit of solubility. Information given is based on data obtained from similar substances.

**Toxicity to algae**
- No toxicity at the limit of solubility. Information given is based on data obtained from similar substances.

**Elimination information (persistence and degradability)**

**Biodegradability**
- This material is expected to be readily biodegradable.

**Ecotoxicology Assessment**

**Acute aquatic toxicity**
- No toxicity at the limit of solubility.
Chronic aquatic toxicity: No toxicity at the limit of solubility.
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.

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.

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 : Acute Health Hazard

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 SOCMI 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.

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 : Not in compliance with the inventory
Switzerland CH INV : Not in compliance with the inventory
United States of America TSCA : On the inventory, or in compliance with the inventory
Canada NDSL : This product contains one or several components listed in the Canadian NDSL.
Australia AICS : Not in compliance with the inventory
New Zealand NZIoC : Not in compliance with the inventory
Japan ENCS : On the inventory, or in compliance with the inventory
Korea KECI : Not 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: 1
Fire Hazard: 1
Reactivity Hazard: 0

Further information

Legacy SDS Number : CPC00579
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.

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