



AlphaPlus® C20-24

Version 2.10

Revision Date 2018-08-03

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

Product information

Product Name : AlphaPlus® C20-24

EC-No.Registration number

| Chemical name | CAS-No. EC-No. Index No. | Legal Entity Registration number |
|----------------------------|--------------------------------|--|
| Alkenes, C20-24 α - | 93924-10-8 300-202-1 | Qatar Chemical Company LTD (Q-Chem) 01-2119485290-39-0003 |

Relevant Identified Uses Supported :

- Manufacture
- Use as an intermediate
- Formulation
- Use in Oil and Gas field drilling and production operations - Industrial
- Use in Oil and Gas field drilling and production operations – Professional
- Lubricants - Industrial
- Lubricants - Professional
- Lubricants - Consumer
- Metal working fluids / rolling oils - Industrial
- Metal working fluids / rolling oils – Professional
- Use as a fuel - industrial
- Use as a fuel – professional
- Use as a fuel – consumer
- Functional Fluids - Industrial
- Functional Fluids - Professional
- Functional Fluids - Consumer
- Use in polymer production – industrial
- Other consumer uses

Company : Qatar Chemical Company LTD (QChem)
Amwal Tower, Omar Al Mukhtar St,
Al-Dafna (Zone 61)
PO Box 24646
Doha, Qatar

SDS Requests: (+974) 4484-7110
Technical Information: (+974) 4477-0047
Responsible Party: Product Safety Group
Email: MSDSInquiry@qchem.com.qa

Local : Muntajat B.V. (MBV OR)
19th Floor, Tower E, WTC The Hague
Prinses Margrietplantsoen 78-A, 2595 BR

AlphaPlus® C20-24

Version 2.10

Revision Date 2018-08-03

The Hague, the Netherlands.

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
REGULATION (EC) No 1272/2008**

Aspiration hazard, Category 1

H304:

May be fatal if swallowed and enters airways.

Label elements**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.

P331
Storage:
 P405 Store locked up.

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

Hazardous ingredients which must be listed on the label:

- 93924-10-8 Alkenes, C20-24 α -

AlphaPlus® C20-24

Version 2.10

Revision Date 2018-08-03

SECTION 3: Composition/information on ingredients

Synonyms : NAO 20-24
C20-24 Alpha Olefin Fraction

Molecular formula : UVCB

Hazardous ingredients

| Chemical name | CAS-No. EC-No. Index No. | Classification (REGULATION (EC) No 1272/2008) | Concentration [wt%] |
|----------------------------|--------------------------------|---|------------------------|
| Alkenes, C20-24 α - | 93924-10-8 300-202-1 | Asp. Tox. 1; H304 | 100 |

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

SECTION 4: 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. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician. Take victim immediately to hospital. Do not ingest. If swallowed then seek immediate medical assistance.

SECTION 5: Firefighting measures

Flash point : 183 °C (361 °F)
Method: PMCC

Autoignition temperature : 239 °C (462 °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

AlphaPlus® C20-24

Version 2.10

Revision Date 2018-08-03

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 : Use personal protective equipment. Avoid dust formation. Avoid breathing dust. Ensure adequate ventilation.

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.

Methods for cleaning up : Keep in suitable, closed containers for disposal.
A quantitative risk assessment is not required for the environment.
A quantitative risk assessment is not required for human health.

SECTION 7: Handling and storage**Handling**

Advice on safe handling : Avoid formation of respirable particles. 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 : 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. Observe label precautions. Electrical installations / working materials must comply with the technological safety standards.

SECTION 8: Exposure controls/personal protection

PNEC : Fresh water
Value: 0,001 mg/l

PNEC : Marine water
Value: 0,001 mg/l

Engineering measures

Adequate ventilation to control airborne concentrations below the exposure guidelines/limits.

Personal protective equipment

AlphaPlus® C20-24

Version 2.10

Revision Date 2018-08-03

- 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 / P100. 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 specific work-place. Wear as appropriate:. Protective suit.
- 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**Information on basic physical and chemical properties****Appearance**

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

Safety data

- Flash point : 183 °C (361 °F)
Method: PMCC
- Lower explosion limit : No data available
- Upper explosion limit : No data available
- Oxidizing properties : no
- Autoignition temperature : 239 °C (462 °F)
- Molecular formula : UVCB
- Molecular weight : Varies

AlphaPlus® C20-24

Version 2.10

Revision Date 2018-08-03

| | |
|--|---|
| pH | : Not applicable |
| Melting point/range | : 35 °C (95 °F) |
| Pour point | No data available |
| Boiling point/boiling range | : 342 - 390 °C (648 - 734 °F) |
| Vapor pressure | : < 0,01 kPa at 65 °C (149 °F) |
| Relative density | : 0,8 at 15,6 °C (60,1 °F) |
| Density | : 815 kg/m ³ at 15 °C (59 °F) 792 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 | : 6,356 cSt at 40 °C (104 °F) |
| Relative vapor density | : Not applicable |
| Evaporation rate | : Not applicable |

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

SECTION 11: Toxicological information

AlphaPlus® C20-24

Version 2.10

Revision Date 2018-08-03

AlphaPlus® C20-24**Acute oral toxicity**

: LD50 Oral: > 5.000 mg/kg
Species: Rat
Sex: male and female
Method: OECD Test Guideline 423
Test substance: yes

AlphaPlus® C20-24**Acute inhalation toxicity**

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

AlphaPlus® C20-24**Acute dermal toxicity**

: LD50 Dermal: > 2.000 mg/kg
Species: Rat
Sex: male and female
Method: OECD Test Guideline 402
Information given is based on data obtained from similar substances.

AlphaPlus® C20-24**Skin irritation**

: No skin irritation.

AlphaPlus® C20-24**Eye irritation**

: Vapors may cause irritation to the eyes, respiratory system and the skin.

AlphaPlus® C20-24**Sensitization**

: Did not cause sensitization on laboratory animals.

Repeated dose toxicity

Alkenes, C20-24 α -

: Species: Rat, Male and female
Sex: Male and female
Application Route: oral gavage
Dose: 100, 500, 1000 mg/kg/d
Exposure time: 42-51 days
Number of exposures: Daily
NOEL: 1000 mg/kg bw/day
Method: OECD Guideline 422

AlphaPlus® C20-24

Version 2.10

Revision Date 2018-08-03

Species: Rat, Male and female
 Sex: Male and female
 Application Route: oral gavage
 Dose: 100, 500, 1000 mg/kg/d
 Exposure time: 13 weeks
 Number of exposures: 7 d/wk
 NOEL: 1000 mg/kg bw/day
 Method: OCED Guideline 408

Species: Rat, Male and female
 Sex: Male and female
 Application Route: Inhalation
 Dose: 300, 1000, 3000 ppm
 Exposure time: 13 weeks
 Number of exposures: 5 d/wk, 6 hrs/d
 NOEL: 3000 ppm
 Method: OECD Guideline 413

Reproductive toxicityAlkenes, C20-24 α -

: Species: Rat
 Sex: male and female
 Application Route: oral gavage
 Dose: 100, 500, 1000 mg/kg/day
 Number of exposures: Daily
 Test period: 41-55 days
 Method: OECD Guideline 422
 NOAEL Parent: 1000 mg/kg bw/day
 NOAEL F1: 1000 mg/kg bw/day

Species: Rat
 Sex: male and female
 Application Route: oral gavage
 Dose: 100, 500, 1000 mg/kg/d
 Number of exposures: Daily
 Test period: 42-51days
 Method: OECD Guideline 421
 NOAEL Parent: 1000 mg/kg bw/day
 NOAEL F1: 1000 mg/kg bw/day

**AlphaPlus® C20-24
Aspiration toxicity**

: Substances known to cause human aspiration toxicity hazards or to be regarded as if they cause human aspiration toxicity hazard.
 May be fatal if swallowed and enters airways.

CMR effectsAlkenes, C20-24 α -

: Carcinogenicity: Not available
 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® C20-24
Further information**

: Solvents may degrease the skin.

AlphaPlus® C20-24

Version 2.10

Revision Date 2018-08-03

SECTION 12: Ecological information**Ecotoxicity effects**

Toxicity to fish : LL50: > 1,000 mg/l
 Exposure time: 96 h
 Species: Oncorhynchus mykiss (rainbow trout)
 semi-static test Method: OECD Test Guideline 203
 The product has low solubility in the test medium. An aqueous dispersion was tested.

Toxicity to daphnia and other aquatic invertebrates : EL50: 1,000 mg/l
 Exposure time: 48 h
 Species: Daphnia magna (Water flea)
 static test Method: OECD Test Guideline 202

Toxicity to algae : EL50: > 1,000 mg/l
 Exposure time: 72 h
 Species: Selenastrum capricornutum (algae)
 static test Method: OECD Test Guideline 201
 The product has low solubility in the test medium. An aqueous dispersion was tested.

Elimination information (persistence and degradability)

Bioaccumulation : This material is not expected to bioaccumulate.

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

Ecotoxicology Assessment

Results of PBT assessment : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

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.

Product : Do not dispose of waste into sewer. Do not contaminate ponds, waterways or ditches with chemical or used container.

AlphaPlus® C20-24

Version 2.10

Revision Date 2018-08-03

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

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

AlphaPlus® C20-24

Version 2.10

Revision Date 2018-08-03

SECTION 15: Regulatory information**National legislation****Chemical Safety Assessment**

Ingredients : Alkenes, C20-24 α - A Chemical Safety Assessment 300-202-1 has been carried out for this substance.

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

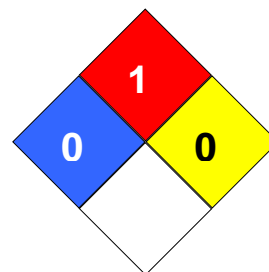
Water contaminating class (Germany) : nwg not water endangering

Notification status

Europe REACH : On the inventory, or in compliance with the inventory
 United States of America (USA) TSCA : On the inventory, or in compliance with the inventory
 Canada DSL : On the inventory, or in compliance with the inventory
 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 : 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 : QCHEM016

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® C20-24

Version 2.10

Revision Date 2018-08-03

| | | | |
|--------|--|-------|--|
| 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.

H304

May be fatal if swallowed and enters airways.