
SAFETY DATA SHEET

According to Regulation (EC) No. 1907/2006 (REACH) Article 31, Annex II as amended.

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

1.1 Product identifier

Product name:
VARISOFT EQ 65 MB

Chemical name:
MDEA Esterquat

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

Identified uses: Industrial Use

Uses advised against: None known.

1.3 Details of the supplier of the safety data sheet

Company Name : Gracefruit Limited
209 Glasgow Road
Longcroft
Bonnybridge
FK41QQ
Telephone : 01324 841353

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

The product has been classified according to the legislation in force.

Classification according to Regulation (EC) No 1272/2008 as amended.

Environmental Hazards

| | | |
|--|------------|--|
| Chronic hazards to the aquatic environment | Category 3 | H412: Harmful to aquatic life with long lasting effects. |
| Chronic hazards to the aquatic environment | Category 3 | H412: Harmful to aquatic life with long lasting effects. |

2.2 Label Elements

Hazard Statement(s): H412: Harmful to aquatic life with long lasting effects.H412: Harmful to aquatic life with long lasting effects.

Precautionary Statements

Prevention: P273: Avoid release to the environment. P273: Avoid release to the environment.

Disposal: P501: Dispose of contents/container in accordance with local regulation. P501: Dispose of contents/container in accordance with local regulation.

2.3 Other hazards None known.

SECTION 3: Composition/information on ingredients

Chemical name:
MDEA Esterquat

3.2 Mixtures

| Chemical name | Concentration | CAS-No. | EC No. | REACH Registration No. | M-Factor: | Notes |
|--|---------------|------------|-----------|------------------------|--------------------|-------|
| Dimethylbis[2-[(1-oxooctadecyl)oxy]ethyl]ammonium chloride | >=50 - <70% | 67846-68-8 | 267-382-0 | 01-2120121302-78 | No data available. | |

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

This substance has workplace exposure limit(s).

This substance is listed as SVHC

Classification

| Chemical name | Classification | Notes |
|--|---------------------------|--------------------|
| Dimethylbis[2-[(1-oxooctadecyl)oxy]ethyl]ammonium chloride | Aquatic Chronic: 3: H412; | No data available. |

CLP: Regulation No. 1272/2008.

The full text for all H-statements is displayed in section 16.

SECTION 4: First aid measures

General: Remove soiled or soaked clothing immediately

4.1 Description of first aid measures

Inhalation: Ensure supply of fresh air. In the event of symptoms seek medical advice.

Skin Contact: In case of contact with skin wash off immediately with plenty of water
Consult a doctor if skin irritation persists.

Eye contact: In case of contact with eyes rinse thoroughly with plenty of water. If symptoms persist, seek medical advice.

Ingestion: Thoroughly clean the mouth with water In the event of symptoms seek medical advice.

4.2 Most important symptoms and effects, both acute and delayed: No special hints.

4.3 Indication of any immediate medical attention and special treatment needed

Hazards: No data available.

Treatment: Treat symptomatically.

SECTION 5: Firefighting measures

General Fire Hazards: Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.

5.1 Extinguishing media

Suitable extinguishing media: foam, carbon dioxide, dry powder, water spray.

Unsuitable extinguishing media: Full water jet

5.2 Special hazards arising from the substance or mixture:

In the event of fire the following can be released: - Nitrogen oxides (NO_x) - carbon dioxide, carbon monoxide Hydrogen chloride. Under certain fire conditions, traces of other toxic products may occur.

5.3 Advice for firefighters

Special fire fighting procedures: Avoid formation of dust

Special protective equipment for fire-fighters: Do not inhale explosion and/or combustion gases Self-contained breathing apparatus.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:

High risk of slipping due to leakage/spillage of product. Use personal protective equipment. Ensure adequate ventilation. Keep away sources of ignition.

6.1.1 For non-emergency personnel: No data available.

6.1.2 For emergency responders: No data available.

6.2 Environmental Precautions: Do not allow to enter drains or waterways Do not discharge into the subsoil/soil.

6.3 Methods and material for containment and cleaning up: Pick up mechanically Dispose of absorbed material in accordance with the regulations.

6.4 Reference to other sections: For further information on exposure monitoring and disposal see sections 8 and 13.

SECTION 7: Handling and storage:

7.1 Precautions for safe handling: Do not inhale vapours or dust Avoid contact with skin and eyes. Provide good ventilation of working area (local exhaust ventilation if necessary). Avoid raising dust.

7.2 Conditions for safe storage, including any incompatibilities: Keep container dry in a cool, well-ventilated place Protect from heat and direct sunlight Protect from heat and exposure to direct sunlight

7.3 Specific end use(s): No further recommendations.

SECTION 8: Exposure controls/personal protection

8.1 Control Parameters Occupational Exposure Limits

DNEL-Values

| Critical component | Type | Route of Exposure | Health Warnings | Remarks |
|--|-----------|-------------------|-------------------|---------|
| Dimethylbis[2-[(1-oxooctadecyl)oxy]ethyl]ammonium chloride | Workers | dermal, long-term | 75 mg/kg bw/day | |
| | Consumers | oral, long-term | 1.25 mg/kg bw/day | |

PNEC-Values

| Critical component | Environmental compartment | PNEC-Values | Remarks |
|--|------------------------------|-------------|---------|
| Dimethylbis[2-[(1-oxooctadecyl)oxy]ethyl]ammonium chloride | Fresh water | 0.054 mg/l | |
| | marine water | 0.0054 mg/l | |
| | freshwater sediment | 109 mg/kg | |
| | marine water sediment | 10.9 mg/kg | |
| | sewage treatment plant (STP) | 4.74 mg/l | |
| | soil | 534 mg/kg | |

8.2 Exposure controls

Appropriate Engineering Controls: No data available.

Individual protection measures, such as personal protective equipment

Eye/face protection: Safety glasses with side-shields

Hand Protection: Additional Information: PVC gloves, The protective gloves to be worn must satisfy the specifications of EC Guideline 89/686/EEC and the resulting Standard EN374.

Skin and Body Protection: protective clothing

Respiratory Protection: in case of formation of vapours/dusts: Short term: filter apparatus, combination filter A-P2

Hygiene measures: Keep away from foodstuffs and beverages. Wash hands before breaks and immediately after handling the product. Do not eat, drink or smoke when working.

Environmental Controls: The environmental regulations on the control and monitoring of environmental exposures are to be observed.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state: solid
Form: Flakes
Color: from white to cream colour

| | |
|---|--|
| Odor: | Characteristic |
| Odor Threshold: | not measured |
| pH: | 3 - 6 (50 g/l,) Isopropanol/water |
| Melting Point: | 75 - 80 °C |
| Boiling Point: | not measured |
| Flash Point: | > 99 °C (DIN EN ISO 2719) |
| Evaporation Rate: | not measured |
| Flammability (solid, gas): | no data available |
| Flammability Limit - Upper (%): | not measured |
| Flammability Limit - Lower (%): | not measured |
| Vapor pressure: | not measured |
| Vapor density (air=1): | not measured |
| Density: | approx. 0.87 g/cm ³ (90 °C) |
| Relative density: | No data available. |
| Solubility(ies) | |
| Solubility in Water: | Dispersible |
| Solubility (other): | not measured |
| Partition coefficient (n-octanol/water): | not measured |
| Self Ignition Temperature: | not measured |
| Decomposition Temperature: | not measured |
| Kinematic viscosity: | No data available. |
| Dynamic viscosity: | approx. 200 mPa.s (90 °C, Brookfield) |

9.2 Other information

| | |
|--------------------------------------|--------------|
| Explosive properties: | not measured |
| Oxidizing properties: | not measured |
| Minimum ignition temperature: | not measured |
| Metal Corrosion: | not measured |

SECTION 10: Stability and reactivity

| | |
|---|---|
| 10.1 Reactivity: | see section "Possibility of hazardous reactions" |
| 10.2 Chemical Stability: | The product is stable under normal conditions. |
| 10.3 Possibility of hazardous reactions: | No hazardous reactions with proper storage and handling. |
| 10.4 Conditions to avoid: | No dangerous reaction known under conditions of normal use. |
| 10.5 Incompatible Materials: | Unknown |
| 10.6 Hazardous Decomposition Products: | None with proper storage and handling. |

SECTION 11: Toxicological information

Information on likely routes of exposure

| | |
|----------------------|---|
| Inhalation: | If handled correctly, not a relevant route of exposure. Information on effects are given below. |
| Skin Contact: | Relevant route of exposure. Information on effects are given below. |
| Eye contact: | Relevant route of exposure. Information on effects are given below. |

Ingestion: If handled correctly, not a relevant route of exposure. Information on effects are given below.

11.1 Information on toxicological effects

Acute toxicity

Oral

Product: LD 50 (Rat): > 2,000 mg/kg (OECD Test Guideline 401)

Components:
Dimethylbis[2-[(1-oxooctadecyl)oxy]ethyl]ammonium chloride
LD50 (Rat): > 5,000 mg/kg

Dermal

Product: no data available

Components:
Dimethylbis[2-[(1-oxooctadecyl)oxy]ethyl]ammonium chloride
No data available.

Inhalation

Product: no data available

Components:
Dimethylbis[2-[(1-oxooctadecyl)oxy]ethyl]ammonium chloride
No data available.

Repeated dose toxicity

Product: No data available.

Components:
Dimethylbis[2-[(1-oxooctadecyl)oxy]ethyl]ammonium chloride
NOEL (Rat, daily): 1000 mg/kg
No observed adverse effect level (Rat, daily): 500 mg/kg

Skin Corrosion/Irritation:

Product: No data available.

Components:
Dimethylbis[2-[(1-oxooctadecyl)oxy]ethyl]ammonium chloride
No data available.

Serious Eye Damage/Eye Irritation:

Product: No data available.

Components:
Dimethylbis[2-[(1-oxooctadecyl)oxy]ethyl]ammonium chloride
Not irritating

Respiratory or Skin

Sensitization:

Product: no data available

Components:

Dimethylbis[2-[(1-oxooctadecyl)oxy]ethyl]ammonium chloride

Buehler Test, OECD 406 (Guinea Pig): non-sensitizing

Germ Cell Mutagenicity**In vitro**

Product: No data available.

Components:

Dimethylbis[2-[(1-oxooctadecyl)oxy]ethyl]ammonium chloride

Ames test (OECD 471): negative
gene mutation (OECD 476): negative
Chromosomal aberration (OECD 473): negative

In vivo

Product: No data available.

Components:

Dimethylbis[2-[(1-oxooctadecyl)oxy]ethyl]ammonium chloride

Micronucleus test (OECD 474) intraperitoneal (i.p.) (Mouse): negative

Carcinogenicity

Product: No data available.

Components:

Dimethylbis[2-[(1-oxooctadecyl)oxy]ethyl]ammonium chloride

No data available.

Reproductive toxicity

Product: No data available.

Components:

Dimethylbis[2-[(1-oxooctadecyl)oxy]ethyl]ammonium chloride

No data available.

Specific Target Organ Toxicity - Single Exposure

Product: no data available

Components:

Dimethylbis[2-[(1-oxooctadecyl)oxy]ethyl]ammonium chloride

No data available.

Specific Target Organ Toxicity - Repeated Exposure

Product: no data available

Components:

Dimethylbis[2-[(1-oxooctadecyl)oxy]ethyl]ammonium chloride

No data available.

Aspiration Hazard**Product:** Not classified**Components:**Dimethylbis[2-[(1-oxooctadecyl)oxy]ethyl]ammonium chloride
No data available.**Other adverse effects:**

Toxicological data refer to the main component. Due to the composition of the product it cannot be excluded: Irritates eyes and skin

SECTION 12: Ecological information**12.1 Toxicity****Acute toxicity****Fish****Product:** LC 50 (Brachydanio rerio, 96 h): 5.2 mg/l (OECD 203) Values refer to the main component.**Components**Dimethylbis[2-[(1-oxooctadecyl)oxy]ethyl]ammonium chloride
LC 50 (Danio rerio (zebra fish), 96 h): 5.2 mg/l (OECD 203)**Aquatic Invertebrates****Product:** EC 50 (Daphnia magna, 24 h): 14.8 mg/l Values refer to the main component.**Components**Dimethylbis[2-[(1-oxooctadecyl)oxy]ethyl]ammonium chloride
EC 50 (Daphnia magna (Water flea), 24 h): 14.8 mg/l (OECD 202)**Toxicity to Aquatic Plants****Product:** EC 50 (Selenastrum capricornutum, 96 h): 2.9 mg/l Values refer to the main component.**Components**Dimethylbis[2-[(1-oxooctadecyl)oxy]ethyl]ammonium chloride
EC 50 (Pseudokirchneriella subcapitata (green algae), 72 h): 1.2 mg/l (OECD 201)**Toxicity to microorganisms****Product:** No data available.**Components**Dimethylbis[2-[(1-oxooctadecyl)oxy]ethyl]ammonium chloride
No data available.**Chronic Toxicity**

Fish

Product: No data available.

Components

Dimethylbis[2-[(1-oxooctadecyl)oxy]ethyl]ammonium chloride
NOEC (Pimephales promelas (fathead minnow), 35 d): 0.686 mg/l (US-EPA)

Aquatic Invertebrates

Product: No data available.

Components

Dimethylbis[2-[(1-oxooctadecyl)oxy]ethyl]ammonium chloride
No data available.

Toxicity to Aquatic Plants

Product: No data available.

Components

Dimethylbis[2-[(1-oxooctadecyl)oxy]ethyl]ammonium chloride
NOEC (Pseudokirchneriella subcapitata (green algae), 72 h): 0.54 mg/l (OECD 201)

12.2 Persistence and Degradability**Biodegradation**

Product: aerobic 60 % Readily biodegradable Values refer to the main component.
aerobic 60 % Product

BOD/COD Ratio

Product No data available.

Components

Dimethylbis[2-[(1-oxooctadecyl)oxy]ethyl]ammonium chloride
No data available.

12.3 Bioaccumulative potential

Product: No data available.

12.4 Mobility in soil:

No data available.

12.5 Results of PBT and vPvB assessment:

Dimethylbis[2-[(1-oxooctadecyl)oxy]ethyl]ammonium chloride
Non-classified vPvB substance
Non-classified PBT substance

12.6 Other adverse effects:

The product is considered to be a water pollutant (German law). Do not allow the product to enter soil or water ways.

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

General information: No data available.

Disposal methods: In accordance with local authority regulations, take to special waste incineration plant

Contaminated Packaging: If empty contaminated containers are recycled or disposed of, the receiver must be informed about possible hazards.

SECTION 14: Transport information

14.1 UN number

Not regulated as a dangerous good

14.2 UN proper shipping name

Not regulated as a dangerous good

14.3 Transport hazard class(es)

Not regulated as a dangerous good

14.4 Packing group

Not regulated as a dangerous good

14.5 Environmental hazards

Not regulated as a dangerous good

14.6 Special precautions for user

Not applicable

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable for product as supplied.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:

EU. Directive 2012/18/EU (SEVESO III) on major accident hazards involving dangerous substances, Annex I: Not applicable

15.2 Chemical safety assessment:

No chemical safety assessment was carried out for this product.

International regulations

SECTION 16: Other information

Abbreviations and acronyms

ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; **ADN** - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; **AGW** - Occupational exposure limit; **ASTM** - American Society for Testing and Materials; **AwSV** - Ordinance on facilities for handling substances that are hazardous to water; **BSB** - Biochemical oxygen demand; **c.c.** - closed cup; **CAS** - Chemical Abstract Services; **CESIO** - European Committee of Organic Surfactants and their Intermediates; **CSB** - Chemical oxygen demand; **DMEL** - Derived minimum effect level; **DNEL** - Derived no effect level; **EbC50** - median concentration in terms of reduction of growth; **EC** - Effective concentration; **EINECS** - European Inventory of Existing Commercial Chemical Substances; **EN** - European norm; **ErC50** - median concentration in terms of reduction of growth rate; **GGVSEB** - German ordinance for road, rail and inland waterway transportation of dangerous goods; **GGVSee** - German ordinance for sea transportation of dangerous goods; **GLP** - Good Laboratory Practice; **GMO** - Genetic Modified Organism; **IATA** - International Air Transport Association; **ICAO** - International Civil Aviation Organization; **IMDG** - International

Maritime Dangerous Goods; **ISO** - International Organization For Standardization; **LD/LC** - lethal dosis/concentration; **LOAEL** - Lowest observed adverse effect level; **LOEL** - Lowest observed effect level; **M-Factor** - multiplying factor; **NOAEL** - No observed adverse effect level; **NOEC** - no observed effect concentration; **NOEL** - no observed effect level; **o.c.** - open cup; **OECD** - Organisation for Economic Cooperation and Development; **OEL** - Occupational Exposure Limit; **PBT** - Persistent, bioaccumulative, toxic; **PNEC** - Predicted no effect concentration; **REACH** - REACH registration; **RID** - Convention concerning International Carriage by Rail; **SVHC** - Substances of Very High Concern; **TA** - Technical Instructions; **TRGS** - Technical Rules for Hazardous Substances; **vPvB** - very persistent, very bioaccumulative; **WGK** - Water Hazard Class

Key literature references and sources for data: No data available.

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]

| Classification according to Regulation (EC) No 1272/2008 as amended. | Classification procedure |
|--|--------------------------|
| Chronic hazards to the aquatic environment, Category 3 | Calculation method |
| Chronic hazards to the aquatic environment, Category 3 | Calculation method |

Wording of the H-statements in section 2 and 3

| | |
|------|--|
| H412 | Harmful to aquatic life with long lasting effects. |
|------|--|

Training information: Comply with national laws regulating employee instruction.

SDS No.:

Disclaimer:

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