



Material safety data sheet

According to EU Regulation 1907/2006 in the current version

VARI BTMS

1. Identification of the substance/mixture and company

Trade name:	Vari-BTMS emulsifier
I.N.C.I.	Cetearyl alcohol, Behentrimonium methosulfate
Chemical name :	Preparation of alkyltrimethylammonium methyl sulphate
Utilization:	Raw material for cosmetic use, conditioning agent
Supplier company identification:	Elemental SRL , Piața Cazărmii no.15, 410188-Oradea, jud.Bihor, Romania Tel/Fax: +40259-436.755, www.elemental.eu
Emergency:	RO: număr național pentru cazuri de urgență: 021 3183606 Institutul de Sănătate Publică București. International emergency number: +49 180 2273-112

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.

Health Hazards

Skin irritation Category 2 H315: Causes skin irritation.

Serious Eye Damage/Eye Irritation Category 1 H318: Causes serious eye damage.

Specific Target Organ Toxicity - Repeated Exposure (Oral) Category 2.1. H373: May cause damage to organs through prolonged or repeated exposure if swallowed. Gastro-intestinal tract.

Environmental Hazards

Acute hazards to the aquatic environment

Category 1 H400: Very toxic to aquatic life.

Chronic hazards to the aquatic environment

Category 2 H411: Toxic to aquatic life with long lasting effects.

2.2 Label elements

GHS Classification (RegulationCLP)



Contains:

Docosyltrimethylammonium methyl sulphate

Signal Words:

Danger

Hazard Statement(s):

H315: Causes skin irritation.

H318: Causes serious eye damage.

H373: May cause damage to organs through prolonged or repeated exposure if swallowed.

H410: Very toxic to aquatic life with long lasting effects.

Precautionary Statements

Prevention:

P260: Do not breathe dust/fume/gas/mist/vapors/spray.

P262: Do not get in eyes, on skin, or on clothing.

P280: Wear eye protection/face protection.

Response:

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310: Immediately call a POISON CENTER/doctor.

P332+P313: If skin irritation occurs: Get medical advice/attention

2.3. Other hazards

Not known



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3. Declaration of ingredients

3.1. Substances

Not concerned

3.2. Mixtures

Material	C.A.S	EC No.	REACH Registration No.	%
Docosyltrimethylammonium methyl sulphate	81646-13-1	279-791-1	01-2119949051-44	>=25 - <30%

Classification: Skin Irrit.: 2: H315; Eye Dam.: 1: H318; STOT RE: 2: H373; Aquatic Acute: 1: H400; Aquatic Chronic: 2: H411.

4. First aid measures

4.1 Description of first aid measures

Inhalation:

Ensure supply of fresh air. In the event of symptoms take medical treatment.

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 and seek medical advice

Ingestion:

Thoroughly clean the mouth with water Do not induce vomiting. Call for medical advice immediately; show this safety data sheet

4.2 Most important symptoms and effects, both acute and delayed:

No information is on file to date regarding acute and/or delayed post-exposure symptoms and effects.

4.3 Indication of any immediate medical attention and special treatment needed

Hazards: No data available.

Treatment: Treat symptomatically.

5. Fire fighting measures

General Fire Hazards:

Cool endangered containers with water spray jet. Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations. Collect contaminated firefighting water separately, must not be discharged into the drains.

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: - carbon dioxide, carbon monoxide - Sulphur oxides - Nitrogen oxides (NOx) Under certain fire conditions, traces of other toxic products may occur.

5.3 Advice for firefighters

Special fire fighting procedures: Keep away from sources of ignition - no smoking. Take action to prevent static discharges. Special protective equipment for fire-fighters: Do not inhale explosion and/or combustion gases Use self-contained breathing apparatus and wear protective suit.



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6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:

Use personal protective equipment. Keep away from sources of ignition - no smoking. High risk of slipping due to leakage/spillage of product. Ensure adequate ventilation.

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.

7. Handling and storage

7.1 Precautions for safe handling:

Avoid contact with skin and eyes. Do not inhale vapours or dust Handle and open container with care. Provide good ventilation of working area (local exhaust ventilation if necessary). Provide good ventilation when handling large quantities. Avoid raising dust.

7.2 Conditions for safe storage, including any incompatibilities:

Keep container tightly closed, cool and dry

7.3 Specific end use(s):

No further recommendations

8. Exposure controls / personal protection

8.1 Control parameters

Occupational Exposure Limits: None of the components have assigned exposure limits

DNEL-Values:

Docosyltrimethylammonium methyl sulphate

Workers Inhalation Long-term systemic effects; 0.6 mg/m³

Workers Dermal Long-term systemic effects; 3 mg/kg bw/day

General population

Inhalation / Dermal / Oral Long-term systemic effects No hazard identified

PNEC-Values:

Docosyltrimethylammonium methyl sulphate

fresh water 13 µg/l

marine water 1.3 µg/l

intermittent release 14 µg/l

sewage treatment plant (STP) 0.43 mg/l

freshwater sediment 1.25 mg/kg sediment d.w.

marine sediments 0.125 mg/kg sediment d.w.

soil 1 mg/kg (dry weight)

8.2 Exposure controls

Appropriate Engineering Controls: No data available.

Individual protection measures, such as personal protective equipment

Eye/face protection: Safety goggles

Hand Protection: Additional Information: gloves made of chloroprene (CR, e.g. Neoprene)

Skin and Body Protection: light protective clothing

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

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



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

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state: solid

Form: Pellets

Color: white to slightly yellow

Odor: slight, typical

Odor Threshold: not measured

pH: no data available

Melting Point: not measured

Boiling Point: not measured

Flash Point: > 93 °C

Evaporation Rate: No data available.

Flammability (solid, gas): no data available

Flammability Limit - Upper (%): not measured

Flammability Limit - Lower (%): not measured

Vapor pressure: 0.01 hPa (30 °C)

Vapor density (air=1): No data available.

Density: approx. 0.87 g/cm³

Relative density: No data available.

Solubility(ies) Solubility in Water: Insoluble

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: Not applicable

9.2 Other information

Explosive properties: not measured

Oxidizing properties: not measured

Minimum ignition temperature: not measured

Metal Corrosion: not measured

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: Reactions with strong oxidizing agents.

10.4 Conditions to avoid: Avoid contact with strong oxidants.

10.5 Incompatible Materials: Unknown

10.6 Hazardous Decomposition Products: None with proper storage and handling.

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.



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11.1 Information on toxicological effects

Acute toxicity

Oral

Product: no data available

Components: Docosyltrimethylammonium methyl sulphate LD 50 (Rat): 3,190 mg/kg

Dermal

Product: no data available

Components: Docosyltrimethylammonium methyl sulphate LD 50 (Rabbit): > 2,000 mg/kg

Inhalation

Product: no data available

Components: Docosyltrimethylammonium methyl sulphate No data available

Repeated dose toxicity

Product: No data available.

Components: Docosyltrimethylammonium methyl sulphate NOAEL (Rat(male and female), oral: gavage, daily): 10 mg/kg No observed adverse effect level (Rat(male and female), oral: gavage, daily)

Skin Corrosion/Irritation:

Product: No data available.

Components: Docosyltrimethylammonium methyl sulphate OECD 404 (Rabbit, 4 h): Irritating. Own test result.

Serious Eye Damage/Eye Irritation:

Product: No data available.

Components: Docosyltrimethylammonium methyl sulphate Risk of serious damage to eyes. OECD 405 (Rabbit): Risk of serious damage to eyes. Own test result.

Respiratory or Skin Sensitization:

Product: no data available

Components: Docosyltrimethylammonium methyl sulphate Maximization Test (GPMT), OECD 406 (Guinea Pig): not sensitizing Own test result.

Germ Cell Mutagenicity

In vitro

Product: No data available.

Components: Docosyltrimethylammonium methyl sulphate Ames test (OECD 471): negative The data are derived from the evaluations or test results achieved with similar products (conclusion by analogy).

gene mutation test (OECD 476): negative The data are derived from the evaluations or test results achieved with similar products (conclusion by analogy).

Cytogenetic Test (chromosome aberration) (OECD 487): negative The data are derived from the evaluations or test results achieved with similar products (conclusion by analogy).

In vivo

Product: No data available.

Components: Docosyltrimethylammonium methyl sulphate No data available.

Carcinogenicity

Product: No data available.

Components: Docosyltrimethylammonium methyl sulphate No data available.

Reproductive toxicity

Product: No data available.

Components: Docosyltrimethylammonium methyl sulphate No data available.

Specific Target Organ Toxicity - Single Exposure

Product: no data available

Components: Docosyltrimethylammonium methyl sulphate No data available.

Specific Target Organ Toxicity - Repeated Exposure

Product: no data available

Components: Docosyltrimethylammonium methyl sulphate Oral: Gastro-intestinal tract. - May cause damage to organs through prolonged or repeated exposure.

Aspiration Hazard

Product: Not classified



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Components: Docosyltrimethylammonium methyl sulphate No data available.

Other adverse effects: Causes skin irritation. Causes serious eye damage. May cause damage to organs through prolonged or repeated exposure.

12. Ecological information

12.1 Toxicity

Acute toxicity

Fish

Product: LC 50 (Rainbow Trout, 96 h): 96 mg/l

Components

Docosyltrimethylammonium methyl sulphate

LC 50 (Danio rerio (zebra fish), 96 h): 3.5 mg/l (OECD 203) river water The data are derived from the evaluations or test results achieved with similar products (conclusion by analogy).

Aquatic Invertebrates

Product: EC 50 (Daphnia magna, 48 h): 55 mg/l

Components

Docosyltrimethylammonium methyl sulphate

EC 50 (Daphnia magna (Water flea), 48 h): 1.39 mg/l (OECD 202) Stream water The data are derived from the evaluations or test results achieved with similar products (conclusion by analogy).

Toxicity to Aquatic Plants

Product: EC 50 (Selenastrum capricornutum, 96 h): 0.25 mg/l

Components

Docosyltrimethylammonium methyl sulphate

Toxicity to microorganisms

Product: No data available.

Components

Docosyltrimethylammonium methyl sulphate

EC 50 (activated sludge, 3 h): 43 mg/l (OECD 209) This information is derived from evaluation of or a test result for a similar compound (conclusion based on analogy).

EC10 (Activated sludge, 3 h): 9.5 mg/l (OECD 209) This information is derived from evaluation of or a test result for a similar compound (conclusion based on analogy).

Chronic Toxicity

Fish

Product: No data available.

Components

Docosyltrimethylammonium methyl sulphate

NOEC (Danio rerio (zebra fish), 9 d): 0.24 mg/l (OECD 212) This information is derived from evaluation of or a test result for a similar compound (conclusion based on analogy).

Aquatic Invertebrates

Product: No data available.

Components

Docosyltrimethylammonium methyl sulphate

No data available.

Toxicity to Aquatic Plants

Product: No data available.

Components

Docosyltrimethylammonium methyl sulphate

No data available.

12.2 Persistence and Degradability

Biodegradation

Product: No data available.

BOD/COD Ratio



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Product No data available.

Components

Docosyltrimethylammonium methyl sulphate

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: No data available.

Docosyltrimethylammonium methyl sulphate

Non-classified vPvB substance Non-classified PBT substance

12.6 Other adverse effects:

Do not allow to enter soil, waterways or waste water canal. The product is classified as extremely hazardous to waters (according to the German Regulation on the Classification of Substances Hazardous to Waters (WwSV).

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

14. Transport information

14.1 UN number

ADR:UN 3077

RID:UN 3077

IMDG:UN 3077

IATA:UN 3077

14.2 UN proper shipping name

ADR:

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.

(Alkyltrimethylammonium methyl sulphate)

RID:

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.

(Alkyltrimethylammonium methyl sulphate)

IMDG:

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.

(Alkyltrimethylammonium methyl sulphate)

IATA:

Environmentally hazardous substance, solid, n.o.s.

(Alkyltrimethylammonium methyl sulphate)

14.3 Transport hazard class(es)

ADR:9

RID:9

IMDG:9

IATA:9

14.4 Packing group

ADR

Packing group:III

Classification Code:M7

Hazard Identification Number:90

Labels:9



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RID

Packing group:III

Classification Code:M7

Hazard Identification Number:90

Labels:9

IMDG

Packing group:III

Labels:9

EmS Code:F-A, S-F

Remarks:Stowage category A

IATA (Cargo aircraft only)

Packing instruction (cargo aircraft):956

Packing instruction (LQ):Y956

Packing group:III

Labels:9MI

Remarks:Environmentally hazardous

IATA (Passenger and cargo aircraft)

Packing instruction (passenger aircraft):956

Packing instruction (LQ):Y956

Packing group:III

Labels:9MI

Remarks:Environmentally hazardous

14.5 Environmental hazards

ADR

Environmentally hazardous:yes

RID

Environmentally hazardous:yes

IMDG

Marine pollutant:yes

IATA (Passenger and cargo aircraft)

Environmentally hazardous:yes

IATA (Cargo aircraft only)

Environmentally hazardous:yes

14.6 Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

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

Not applicable for product as supplied.

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:

E1. Hazardous to the aquatic environment 100 t 200 t

National Regulations

15.2 Chemical safety

No chemical safety assessment was carried out for this product.

16. Additional information



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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

Skin irritation, Category 2

Calculation method

Serious Eye Damage/Eye Irritation, Category 1

Calculation method

Specific Target Organ Toxicity - Repeated Exposure, Category 2 Oral

Calculation method

Acute hazards to the aquatic environment, Category 1

On basis of test data

Chronic hazards to the aquatic environment, Category 2

Calculation method

Wording of the H-statements in section 2 and 3

H315 Causes skin irritation.

H318 Causes serious eye damage.

H373 May cause damage to organs through prolonged or repeated exposure by ingestion.

H400 Very toxic to aquatic life.

H411 Toxic to aquatic life with long lasting effects

16.1 Abbreviations:

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

CAS: Chemical Abstracts Service (division of the American Chemical Society).

CLP: Classification, Labeling, Packaging.

DNEL: Derived No Effect Level.

EINECS: European Inventory of Existing Commercial Chemical Substances.

GHS: Globally Harmonized System of Classification and Labeling of Chemicals.

IATA: International Air Transport Association.

IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).

ICAO: International Civil Aviation Organization.

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO).

IMDG: International Maritime Code for Dangerous Goods.

INCI: International Nomenclature of Cosmetic Ingredients.

LTE: Long-term exposure.

PNEC: Predicted No Effect Concentration.

RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.

STE: Short-term exposure.

STEL: Short Term Exposure limit.

STOT: Specific Target Organ Toxicity.

Disclaimer:

This material safety data sheet does not constitute a guarantee of the properties of the product and is not a contractual legal report. The information is given in good faith on the basis of our best knowledge of the product at the indicated time. However, we cannot accept responsibility or liability for any consequences arising from its use, no warranty for correctness and completeness is given. We caution the users against the incurred possible risks when the product is used at other ends than the use for which it was initially planned. It is the user's responsibility during handling, storage and product use to consult the main regulatory texts in force regarding workers and environment protection.