AEB IMPROVEMENT THROUGH BIOTECHNOLOGY

SAFETY DATA SHEET

STERIFOAM

Issued on 09/25/2020 - Rel. # 5 on 09/25/2020

#1/15

In conformity to Regulation (EU) 2015/830

SECTION 1. Identification of the substance/mixture and of the company/enterprise

1.1. Product identifier

Product name: STERIFOAM

Product code: refer to sales department

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

Foaming Cleanser

Sectors of use:

Industrial Manufacturing[SU3], Manufacture of food products[SU4], Public domain (administration, education, entertainment, services, craftsmen)[SU22]

Product category:

Washing and Cleaning Products (including solvent based products)

Process categories:

Industrial spraying[PROC7], Transfer of substance or mixture (charging and discharging) at nondedicated facilities[PROC8A], Transfer of substance or mixture (charging and discharging) at dedicated facilities[PROC8B], Non industrial spraying[PROC11]

Not recommended uses

Do not use for purposes other than those listed

1.3. Details of the supplier of the safety data sheet

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Produced by AEB SpA Via Vittorio Arici 104 S. Polo



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25134 Brescia

1.4. Emergency telephone number

AEB SpA

Centralino/Switchboard: +39.030.2307.1 - (h 8.30-12.00 13.30-18.00 GMT +1; Lingua/Language: Italiano, English)

AEB USA

Switchboard: +1 2096258139 (GMT -8; Language: English)

AEB AFRICA (PTY) LTD

Switchboard: +27 215512700 (GMT +1; Language: English, Afrikaans)

AEB OCEANIA PTY LTD

Switchboard: +61 1300 704 971 (GMT +9; Language: English)

SECTION 2. Hazards identification

2.1. Classification of the substance or mixture

2.1.1 Classification according to Regulation (EC) No 1272/2008:

Pictograms:

GHS05, GHS07, GHS09

Hazard Class and Category Code(s):

Skin Irrit. 2, Eye Dam. 1, Aquatic Acute 1, Aquatic Chronic 2

Hazard statement Code(s):

H315 - Causes skin irritation.

H318 - Causes serious eye damage.

H400 - Very toxic to aquatic life. (Acute toxicity M-factor = 1)

H411 - Toxic to aquatic life with long lasting effects.

If brought into contact with the skin, the product causes significant inflammation with erythema, scabs, or edema. If brought into contact with eyes, the product causes serious damages to eyes, such as an opaque cornea or injury to iris.

The product is dangerous for the environment as it is very toxic to aquatic organisms

The product is dangerous to the environment as it is toxic to aquatic life with long lasting effects

2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008:

Pictogram, Signal Word Code(s):

GHS05, GHS09 - Danger

Hazard statement Code(s):

H315 - Causes skin irritation.

H318 - Causes serious eye damage.

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

Supplemental Hazard statement Code(s):







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not applicable

Precautionary statements:

Prevention

P273 - Avoid release to the environment.

P280 - Wear protective gloves and eye/face protection.

Response

P302+P352 - IF ON SKIN: Wash with plenty of water.

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

Disposal

P501 - Dispose of contents/container to local/regional/national/international regulations

Contains:

alkyl polyglucoside C8-10; amines, C12-14 alkyldimethyl, N-oxides; quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides

Contains (Reg.EC 648/2004):

< 5% cationic surfactants, non-ionic surfactants

2.3. Other hazards

The substance / mixture does NOT contain substances PBT/vPvB according to Regulation (EC) No 1907/2006, Annex XIII

Do not ingest. Keep out of reach of children.

SECTION 3. Composition/information on ingredients

3.1 Substances

Irrilevant

3.2 Mixtures

Refer to paragraph 16 for full text of hazard statements

Substance	Concentration[w/w]	Classification	Index	CAS	EINECS	REACh
Alkyl (C12-16) dimethylbenzyl ammonium chloride	>= 1 < 5%	Acute Tox. 4, H302; Skin Corr. 1B, H314; Eye Dam. 1, H318; Aquatic Acute 1, H400; Aquatic Chronic 1, H410 Acute toxicity M-factor = 10		68424-85-1	270-325-2	01-2119965 180-41-XXX X
Amines, C12-14 alkyldimethyl, N-oxides	>= 1 < 5%	Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Dam. 1, H318; Aquatic Acute 1, H400; Aquatic Chronic 2, H411		308062-28-4	931-292-6	01-2119490 061-47-XXX X
Alkyl polyglucoside C8 - 10	>= 1 < 5%	Eye Dam. 1, H318		68515-73-1	500-220-1	01-2119488 530-36-XX



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Substance	Concentration[w/w]	Classification	Index	CAS	EINECS	REACh
						XX

SECTION 4. First aid measures

4.1. Description of first aid measures

Inhalation:

Ventilate the area. Move immediately the contaminated patient from the area and keep him at rest in a well ventilated area. If you feel unwell seek medical advice.

Direct contact with skin (of the pure product).:

Take off immediately contaminated clothing.

Wash immediately with plenty of running water and possibly with soap, the areas of the body that have, or are only suspected to have, come in contact with the product.

In case of contact with skin, wash immediately with watrer.

Direct contact with eyes (of the pure product).:

Wash immediately and thoroughly with running water, keeping eyelids open for at least 10 minutes, then protect your eyes with a dry sterile gauze. Seek medical advice immediately

Do not use eye drops or ointments of any kind before the examination or advice from an oculist.

Ingestion:

Not hazardous. It's possible to give activated charcoal in water or medicinal mineral vaseline oil.

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

Contact with eyes causes very severe irritation, including redness and tear. In contact with skin it causes irritation and redness

4.3. Indication of any immediate medical attention and special treatment needed

If skin irritation occurs: Get medical advice/attention. Immediately call a POISON CENTER or a doctor.

SECTION 5. Firefighting measures

5.1. Extinguishing media

Suggested extinguishing media:

Water spray, CO2, foam, dry chemical, depending on the materials involved in the fire.

Extinguishing media to avoid:

Water jets. Use water jets only to cool the surfaces of the containers exposed to fire.

5.2. Special hazards arising from the substance or mixture

No data available.

5.3. Advice for firefighters

Use protection for the breathing apparatus

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Safety helmet and full protective clothing.

The water spray can be used to protect the people involved in the extinction.

You may also use self-contained breathing apparatus, especially when working in confined and poorly ventilated areas. Keep containers cool with water spray

SECTION 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1 For non-emergency personnel:

Leave the area surrounding the spill or release. Do not smoke

Wear mask, gloves and protective clothing.

6.1.2 For emergency responders:

Eliminate all unquarded flames and possible sources of ignition. No smoking.

Privide a sufficient ventilation.

Evacuate the danger area and, in case, consult an expert.

6.2. Environmental precautions

Contain spills with earth or sand.

If the product has entered a watercourse, sewers or has contaminated soil or vegetation, notify the authorities. Dispose of the waste material in compliance with the regulations

6.3. Methods and material for containment and cleaning up

6.3.1 Containment:

Rapidly recover the product, wear a mask and protective clothing (for specifications refer to section 8.2. SDS) Recover the product for reuse, if possible, or for removal. Possibly absorb it with inert materia or sucked it. Prevent it from entering the sewer system.

6.3.2 Cleaning up:

After wiping up, wash with water the area and materials involved

6.3.3 Other information:

None in particular.

6.4. Reference to other sections

Refer to paragraphs 8 and 13 for more information

SECTION 7. Handling and storage

7.1. Precautions for safe handling

Avoid contact and inhalation of vapors

Wear protective gloves and eye/face protection.

At work do not eat or drink.

See also paragraph 8 below.

7.2. Conditions for safe storage, including any incompatibilities

Keep in original container closed tightly. Do not store in open or unlabelled containers.

Keep containers upright and safe by avoiding the possibility of falls or collisions.

Store in a cool and dry place, away from heat sources and direct exposure to sunlight.

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7.3. Specific end use(s)

Industrial Manufacturing:

Handle with extreme caution.

Store in a well ventilated place away from heat sources. (7-30°C)

Manufacture of food products:

Handle with care.

Store in a clean, dry, ventilated area away from heat and direct sunlight.

Keep container tightly closed. (7-30°C)

Public domain (administration, education, entertainment, services, craftsmen):

Handle with care. Store in a ventilated area and away from heat, keep the container tightly closed.(7-30°C)

See the annex exposure scenario.

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

Related to contained substances:

Alkyl (C12-16) dimethylbenzyl ammonium chloride:

Related to the substances contained:

Alkyl chloride (C12-16) dimethylbenzilammony:

It does not contain substances with professional exposure values.

Limits on professional exposure to decomposition products:

Hydrogen chloride (7647-01-0)

TWA 5ppm 8mg/m3 IT OEL

STEL 10ppm 15mg/m3 IT OEL

Hydrogen chloride (7647-01-0)

C 2 ppm 2007-01-01 ACGIH

further information: URT irt: Upper Respiratory Tract irritation

A4: Not classible as a human carcinogen

C 5ppm 7mg/m3 2013-10-08 NIOSH REL

C 5ppm 7mg/m3 2006-02-28 OSHA Z-1

C 5ppm 7mh/m3 1989-01-19 OSHA P0

PEL 0.3 ppm 0.45 mg/m3 2014-11-26 CAL PEL

C 2ppm 2014-11-26 CAL PEL

- Substance: Alkyl (C12-16) dimethylbenzyl ammonium chloride DNEL

Systemic effects Long term Workers inhalation = 3,96 (mg/m3)

Systemic effects Long term Workers dermal = 5,7 (mg/kg bw/day)

Systemic effects Long term Consumers inhalation = 1,64 (mg/m3)

Systemic effects Long term Consumers dermal = 3,4 (mg/kg bw/day)

Systemic effects Long term Consumers oral = 3,4 (mg/kg bw/day)

PNEC

Sweet water = 0,0009 (mg/I)

sediment Sweet water = 12,27 (mg/kg/sediment)

Sea water = 0,00096 (mg/l)

sediment Sea water = 13,09 (mg/kg/sediment)

STP = 0.4 (mg/l)

ground = 7 (mg/kg ground)

- Substance: Amines, C12-14 alkyldimethyl, N-oxides

DNEL

Systemic effects Long term Workers inhalation = 6,2 (mg/m3)



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Systemic effects Long term Workers dermal = 11 (mg/kg bw/day)
Systemic effects Long term Consumers inhalation = 1,53 (mg/m3)
Systemic effects Long term Consumers dermal = 5,5 (mg/kg bw/day)
Systemic effects Long term Consumers oral = 0,44 (mg/kg bw/day)
PNEC
Sweet water = 0,0335 (mg/l)
sediment Sweet water = 5,24 (mg/kg/sediment)
Sea water = 0,00335 (mg/l)
sediment Sea water = 0,524 (mg/kg/sediment)
intermittent emissions = 0,0335 (mg/l)
STP = 24 (mg/l)
ground = 1,02 (mg/kg ground)

- Substance: Alkyl polyglucoside C8 - 10

DNEL

Systemic effects Long term Workers inhalation = 420 (mg/m3)

Systemic effects Long term Workers dermal = 595000 (mg/kg bw/day)

Systemic effects Long term Consumers inhalation = 124 (mg/m3)

Systemic effects Long term Consumers dermal = 357000 (mg/kg bw/day)

Systemic effects Long term Consumers oral = 35,7 (mg/kg bw/day)

PNEC

Sweet water = 0.176 (mg/I)

sediment Sweet water = 1516 (mg/kg/sediment)

Sea water = 0.0176 (mg/I)

sediment Sea water = 0,152 (mg/kg/sediment)

intermittent emissions = 0,27 (mg/l)

STP = 560 (mg/l)

8.2. Exposure controls

Appropriate engineering controls:

Industrial Manufacturing:

No specific monitoring foreseen (act according to good practice and specific rules for the type of risk associated)

Manufacture of food products:

No specific monitoring foreseen (act according to good practice and specific rules for the type of risk associated)

Public domain (administration, education, entertainment, services, craftsmen):

No specific monitoring foreseen (act according to good practice and specific rules for the type of risk associated)

- 8.2.2 Individual protection measures:
- (a) Eye / face protection Wear protective goggles (EN 166).
 - (b) Skin protection
 - (i) Hand protection

When handling the pure product use chemical resistant protective gloves (EN 374-1/EN374-2/EN374-3)

(ii) Other

During working operation wear protective clothing (generic workwear / antacid, safety shoes or other protective equipment) according to the instructions of the employer.



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(c) Respiratory protection Not needed for normal use

In case of insufficient ventilation or emergency, use mask with gas filters and organics vapors -Brown , Class 3 , A (EN 405) unless otherwise provided by the employer and / or assessments of environmental investigations hygienistic. None required if airborne concentrations are maintained below the exposure limit listed in Exposure Limit Information. Use certified respiratory protection equipment meeting EU requirements (89/656/EEC, 245/2016 UE), or equivalent, when respiratory risks cannot be avoided or sufficiently limited by technical means of collective protection or by measures, methods or procedures of work organization

(d) Thermal hazards No hazard to report

Environmental exposure controls:

Use according to good working practices and avoid to disperse the product into the environment.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical and chemical properties	Value	Determination method
Appearance	clear brown liquid	
Odour	not determined as considered not relevant for the characterization of the product	
Odour threshold	not determined as considered not relevant for the characterization of the product	
рН	7.5 ± 0.5 (20 ° C; sol. 6%); 7.5 ± 0.5 (20 ° C; 100%)	
Melting point/freezing point	not determined as considered not relevant for the characterization of the product	
Initial boiling point and boiling range	not determined as considered not relevant for the characterization of the product	
Flash point	not determined as considered not relevant for the characterization of the product	
Evaporation rate	not determined as considered not relevant for the characterization of the product	
Flammability (solid, gas)	not determined as considered not relevant for the characterization of the product	
Upper/lower flammability or explosive limits	not determined as considered not relevant for the characterization of the product	
Vapour pressure	not determined as considered not relevant for the characterization of the product	
Vapour density	not determined as considered not relevant for the characterization of the product	
Relative density	1.00 ± 0.05 (20 ° C)	
Solubility	not determined as considered not relevant for the characterization of the product	
Water solubility	not determined as considered not relevant for the characterization of the product	
Partition coefficient: n-octanol/water	not determined as considered not relevant for the characterization of the product	
Auto-ignition temperature	not determined as considered not relevant for the characterization of the product	
Decomposition temperature	not determined as considered not relevant for the characterization of the product	

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Physical and chemical properties	Value	Determination method
1	not determined as considered not relevant for the characterization of the product	
1 ' '	not determined as considered not relevant for the characterization of the product	
1- 31 1	not determined as considered not relevant for the characterization of the product	

9.2. Other information

No data available.

SECTION 10. Stability and reactivity

10.1. Reactivity

No reactivity hazards

10.2. Chemical stability

No hazardous reaction when handled and stored according to provisions.

10.3. Possibility of hazardous reactions

There are no hazardous reactions

10.4. Conditions to avoid

Heat and direct light

10.5. Incompatible materials

Hazardous decomposition products: Halogenated components Hydrogen chloride Thermal decomposition: No data available

10.6. Hazardous decomposition products

Does not decompose when used for intended uses.

SECTION 11. Toxicological information

11.1. Information on toxicological effects

ATE(mix) oral = 15.404,2 mg/kg ATE(mix) dermal = ∞

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ATE(mix) inhal = ∞

(a) acute toxicity: Alkyl (C12-16) dimethylbenzyl ammonium chloride: LD50 (rat)> 300 - 2000 mg / kg Guideline 401 for OECD test Skin contact -

LC50 rat / rabbit (mg / kg / 24h bw): nd Inhalation -

LD50 rat (mg / I / 4h): nd

Amines, C12-14 alkyldimethyl, N-oxides: Ingestion - LD50 rat (mg / kg / 24h bw): 1064

Skin contact - LC50 rat / rabbit (mg / kg / 24h bw): na

Inhalation - LD50 rat (mg / I / 4h): na

Alkyl polyglucoside C8 - 10: Practically non-toxic to individual skin contact and/or single ingestion

Oral rat LD50 value: > 2000 mg/kg

Dermal LC50 rat/rabbit value: > 2000

(b) skin corrosion/irritationIf brought into contact with the skin, the product causes significant inflammation with erythema, scabs, or edema.

Alkyl (C12-16) dimethylbenzyl ammonium chloride: Causes severe skin burns

Amines, C12-14 alkyldimethyl, N-oxides: Non-corrosive

Alkyl polyglucoside C8 - 10: Not corrosive

Alkyl (C12-16) dimethylbenzyl ammonium chloride: Causes severe skin burns

Amines, C12-14 alkyldimethyl, N-oxides: Irritating

Alkyl polyglucoside C8 - 10: Not irritating

(c) serious eye damage/irritation: If brought into contact with eyes, the product causes serious damages to eyes, such as an opaque cornea or injury to iris.

Alkyl (C12-16) dimethylbenzyl ammonium chloride: Causes serious eye damage

Amines, C12-14 alkyldimethyl, N-oxides: Corrosive

Alkyl polyglucoside C8 - 10: Corrosive

Alkyl (C12-16) dimethylbenzyl ammonium chloride: Causes serious eye damage

Amines, C12-14 alkyldimethyl, N-oxides: Irritating

Alkyl polyglucoside C8 - 10: Irritating

(d) respiratory or skin sensitization: Alkyl (C12-16) dimethylbenzyl ammonium chloride: Not sensitizing

Amines, C12-14 alkyldimethyl, N-oxides: Not available

Alkyl polyglucoside C8 - 10: Not sensitizing

(e) germ cell mutagenicity: Alkyl (C12-16) dimethylbenzyl ammonium chloride: Not mutagenic

Amines, C12-14 alkyldimethyl, N-oxides: Not available

Alkyl polyglucoside C8 - 10: Not mutagenic

(f) carcinogenicity: Alkyl (C12-16) dimethylbenzyl ammonium chloride: Not carcinogenic

Amines, C12-14 alkyldimethyl, N-oxides: Not available

Alkyl polyglucoside C8 - 10: Not carcinogenic

(g) reproductive toxicity: Alkyl (C12-16) dimethylbenzyl ammonium chloride: Non-toxic for reproduction

Amines, C12-14 alkyldimethyl, N-oxides: Not available

Alkyl polyglucoside C8 - 10: Non-toxic for reproduction

(h) specific target organ toxicity (STOT) single exposure: Alkyl (C12-16) dimethylbenzyl ammonium chloride: Non-toxic for single exposure

Amines, C12-14 alkyldimethyl, N-oxides: Not available

Alkyl polyglucoside C8 - 10: Unavailable

(i) specific target organ toxicity (STOT) repeated exposureAlkyl (C12-16) dimethylbenzyl ammonium chloride:

Non-toxic for repeated exposure

Amines, C12-14 alkyldimethyl, N-oxides: Not available

Alkyl polyglucoside C8 - 10: Unavailable

(j) aspiration hazard: Alkyl (C12-16) dimethylbenzyl ammonium chloride: Non-toxic by suction

Amines, C12-14 alkyldimethyl, N-oxides: Not available

Alkyl polyglucoside C8 - 10: Unavailable

SECTION 12. Ecological information

12.1. Toxicity



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Related to contained substances:

Alkyl (C12-16) dimethylbenzyl ammonium chloride:

LC50-96h fish (lepomis macrochirus):> 0.1 - 1 mg / I

EC50-48h aguatic invertebrates (daphnia magna):> 0.01 - 0.1 mg / I

EC50-72h algae (pseudokirchneriella):> 0.01 - 0.1 mg / I

NOEC-72h algae (pseudokirchneriella):> 0.001 - 0.01 mg / I

NOEC-21d aguatic invertebrates (daphnia magna):> 0.01 - 0.1 mg / I

Acute toxicity M-factor = 10

Amines, C12-14 alkyldimethyl, N-oxides:

Acute toxicity - fish LC50 (mg / I / 96h): 2.67

Acute toxicity - crustaceans (Daphnia magna) EC50 (mg / I / 48h): 3.1

Acute algae toxicity - ErC50 (mg / I / 72h): 0.66

Chronic toxicity - fish NOEC (mg / I / 302d): 0.42

Chronic toxicity - crustaceans (Daphnia magna) NOEC (mg / I / 21d): 0.7

Chronic toxicity - algae NOEC (mg / I / 28d): 0.067

C(E)L50 (mg/I) = 0.66

NOEC (mg/I) = 0.067

Alkyl polyglucoside C8 - 10:

Ittiotossicità:

LC50 > 100 mg/l (DIN EN ISO 7346-2)

Aquatic invertebrates:

EC50 > 100 mg/l (OECD-guideline 202, part 1)

Aquatic plants:

EC50 > 10-100 mg/l (Directive 88/302/EEC, part C, p 89)

Microorganisms/effects on activated sludge:

Ce0 > 100 mg/l (OECD-guideline 209)

Ce0 > 100 mg/l (DIN 38412 part 8)

Chronic toxicity on fish:

NOEC > 1-10 mg/l (OECD Guideline 204)

Chronic toxicity to aquatic invertebrates:

NOEC > 1-10 mg/l (OECD-guideline 202, part 2)

The product is dangerous for the environment as it is very toxic to aquatic organisms following acute exposure. The product is dangerous for the environment as it is toxic to aquatic organisms following acute exposure.

Use according to good working practices and avoid to disperse the product into the environment.

12.2. Persistence and degradability

Related to contained substances:

Alkyl (C12-16) dimethylbenzyl ammonium chloride:

Quickly biodegradable

Amines, C12-14 alkyldimethyl, N-oxides:

Easily biodegradable

Alkyl polyglucoside C8 - 10:

Evaluation of biodegradability and delete (H2O):

Readily biodegradable (according to OECD criteria).

Disposal considerations:

(Annex III, part A) The surfactant (s) contained in this formulation is (are) subject (s) to the biodegradability criteria as laid down in Regulation (EC) No 648/2004 on detergents. All the supporting data shall be kept available to the competent authorities of the Member States and will be provided to the authorities at their request or at the request of a

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manufacturer of the formula.

12.3. Bioaccumulative potential

Related to contained substances:

Alkyl (C12-16) dimethylbenzyl ammonium chloride:

Bioaccumulation is unlikely

Amines, C12-14 alkyldimethyl, N-oxides:

log Pow: <2.7

Alkyl polyglucoside C8 - 10:

Assessment of bioaccumulation potential: No accumulation in organisms should be expected.

12.4. Mobility in soil

Related to contained substances:

Alkyl (C12-16) dimethylbenzyl ammonium chloride:

No data available

Amines, C12-14 alkyldimethyl, N-oxides:

Easily absorbed into the soil.

Alkyl polyglucoside C8 - 10:

Evaluation of transport between environmental departments: The substance does not evaporate into the atmosphere from the surface of the water. An absorption to the solid phase of the soil is possible.

12.5. Results of PBT and vPvB assessment

No PBT/vPvB ingredient is present

12.6. Other adverse effects

No adverse effects

Regulation (EC) No 2006/907 - 2004/648

The (I) surfactant (s) content (s) in this preparation complies (comply) with (i) the biodegradability criteria as laid down in Regulation CE/648/2004 on detergents. All data are held at the disposal of the competent authorities of Member States and will be provided, at their direct request or at the request of a detergent manufacturer, to those authorities.

SECTION 13. Disposal considerations

13.1. Waste treatment methods

Do not reuse empty containers. Dispose of them in accordance with the regulations in force. Any remaining product should be disposed of according to applicable regulations by addressing to authorized companies.

Recover if possible. Send to authorized discharge plants or for incineration under controlled conditions. Operate according to local and National rules in force

SECTION 14. Transport information



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14.1. UN number

ADR/RID/IMDG/ICAO-IATA: 3082



If subject to the following characteristics is ADR exempt: Combination packagings: per inner packaging 5 L per package 30 Kg Inner packaging placed in skrink-wrapped or stretch-wrapped trays: per inner packaging 5 L per package 20 Kg

14.2. UN proper shipping name

ADR/RID/IMDG: MATERIA PERICOLOSA PER L'AMBIENTE, LIQUIDA, N.A.S. (Quaternary ammonium compounds in mixture)

ADR/RID/IMDG: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Quaternary ammonium

compounds in mixture)

ICAO-IATA: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Quaternary ammonium compounds in mixture)

14.3. Transport hazard class(es)

ADR/RID/IMDG/ICAO-IATA: Class: 9

ADR/RID/IMDG/ICAO-IATA: Label: 9+Environment

ADR: Tunnel restriction code: --

ADR/RID/IMDG/ICAO-IATA: Limited quantities : 5 L

IMDG - EmS: F-A, S-F

14.4. Packing group

ADR/RID/IMDG/ICAO-IATA: III

14.5. Environmental hazards

ADR/RID/ICAO-IATA: Product is environmentally hazardous IMDG: Marine polluting agent: Yes

14.6. Special precautions for user

The transport must be carried out by authorized vehicles for the transport of dangerous goods in accordance with the requirements of the applicable Edition of the agreement A.D.R. and national provisions. The transport must be carried out in the original packaging and in packages that are made from materials resistant to content and not likely to generate with this dangerous reactions. The process of loading and unloading of dangerous goods have received adequate training on the risks presented by prepared and on possible procedures to be taken in the event of emergency situations

14.7. Transport in bulk according to Annex II of MARPOL73/78 and IBC Code

Transport in bulk is not foreseen

AEB

SAFETY DATA SHEET

STERIFOAM

Issued on 09/25/2020 - Rel. # 5 on 09/25/2020

14 / 15

In conformity to Regulation (EU) 2015/830

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

Restrictions relating to the product or contained substances (All. XVII Reg. EC 1907/2006): not applicable Substances in Candidate List (art. 59 Reg. EC 1907/2006): the product does not contain SVHC Substances subject to authorisation (Ann. XIV Reg. CEC 1907/2006): the product does not contain SVHC

Reg. EC 648/04: see 2.2

Reg. (EU) n. 1169/2011: see 2.2 Reg (UE) 528/2012: see.to 2.2

Seveso category:

E1 - ENVIRONMENTAL HAZARDS

REGULATION (EU) No 1357/2014 - waste: HP4 - Irritant — skin irritation and eye damage HP14 - Ecotoxic

15.2. Chemical safety assessment

No chemical safety assessment was carried out by the supplier

SECTION 16. Other information

16.1. Other information

Points modified compared to previous release: 1.2. Relevant identified uses of the substance or mixture and uses advised against, 2.2. Label elements

Description of hazard statements set out in paragraph 3

H302 = Harmful if swallowed.

H314 = Causes severe skin burns and eye damage.

H318 = Causes serious eye damage.

H400 = Very toxic to aquatic life.

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

H315 = Causes skin irritation.

H411 = Toxic to aquatic life with long lasting effects.

Classification based on data of all mixture components

Main normative references:

Reg. (CE) n. 1907 del 18/12/06 REACH (Registration, Evaluation and Authorisation of CHemicals) et seq.

Reg. (CE) 1272/2008 CLP (Classification Labelling and Packaging) et seq.

Regulation (EC) n. 648 of 31/03/04 (on detergents) et seq.

Regulation (UE) n. 1169/2011 (on the provision of food information to consumers)

Directive 2012/18/EU (on the control of major-accident hazards involving dangerous substances) et seq.

Regulation (UE) 528/2012 (Biocides) et seq.

Procedure used to classify under CLP mixture (Reg . EC 1272/2008):

Physical hazards: On the basis of experimental data

H314 Skin. Corr. 1A: On the basis of experimental data / Calculation Method

Other hazards: Calculation Method

Training required: This document must be submitted to the employer to determine the possible need for appropriate training for workers to ensure protection of human health and the environment.

n.a.: not applicable



STERIFOAM

Issued on 09/25/2020 - Rel. # 5 on 09/25/2020

15 / 15

In conformity to Regulation (EU) 2015/830

n.d.: not available

ADR: Accord europèen relative au transport International des merchandises dangereuses par route (European

Agreement concerning the International Carriage of Dangerous Goods by Road)

ATE: Acute Toxicity Estimat
BFC: BioconCentration Factor
BOD: Biochemical Oxigen Demand
CAS: Chemical Abstract Service number
CAP: Centre AntiPoison

CE/EC number EINECS (European Inventory of existing Commercial Substances) e ELINCS (European List of notified

Chemical Substances)

CL50/LC50: Lethal Concentration 50

DL50/LD50: Lethal Dose 50 COD: Chemical Oxygen Demand DNEL: Derived No Effect Level

EC50: half maximal Effective Concentration

ERC: Environment Release Classes

EU/UE: European Union

IATA: International Air Transport Association ICAO: International Civil Aviation Organization

IMDG: International Maritime Dangerous Goods code

Kow: Octanol water partition coefficient NOEC: No Observed Effect Concentration OEL: Occupational Exposure Limit

PBT: Persistent Bioaccumulative and Toxic

PC: Product Categories

PNEC: Predicted No Effect Concentration

PROC: Process Categories

RID: Règlement concernent le transport International ferroviaire des merchandises dangereuses (Regulations concerning International rail transport of dangerous goods)

STOT: Target Organ Systemic Toxicity STOT (RE): Repeated Exposure STOT (SE): Single Exposure

SU: Sector of Use

SVCH: Substance of Very High Concern

TLV: Threshold Limit Value

STP: Sewage Treatment Plants

vPvB: Very Persistent Very Bioaccumulative

References and Sources:

- ECHA Registered Substances:
- https://echa.europa.eu/web/guest/information-on-chemicals/registered-substances
- SDS supplier
- GESTIS DNEL Database: http://www.dguv.de/ifa/gestis/gestis-dnel-datenbank/index-2.jsp
- GESTIS International Limit Value: http://limitvalue.ifa.dguv.de

This msds was made in good faith by AEB technical Office on the basis of the information available at the date of the last revision. The person in charge must regularly inform the employees about the specific risks they encounter when using this substance/product. The information contained here relate only to the substance/the preparation indicated and may not apply if the product is used improperly or in combination with others. Nothing contained herein shall be construed as a guarantee, either express or implied. It is the responsibility of the user to ensure the opportunities and completeness of the information contained herein for their own particular use.

*** this tab annuls and replaces any previous edition. (IIXX)

Changes to the previous edition: label elements variation, attached exposure scenario and working instruction table

SUMI

Safe Use of Mixtures Information





AISE_SUMI_IS_7_5

Version 1.1, August 2018

Industrial spraying; Automated task; Open system; Long term

This document is intended to communicate the conditions of safe use for the product and should always be read in combination with the product's Safety Data Sheet and labels.

General description of the process covered

The SUMI applies to industrial spraying products. This Safe Use Information is based on the AISE_SWED_IS_7_5.

Operational Conditions

Maximum duration	480 minutes per day.
Range of application /	Indoor Use.
Process conditions	Process carried out at room temperature.
	In case of dilution, tap water at a maximum temperature of 45°C is used.
Air exchange rate	Provide a basic standard of general ventilation (1 to 3 air changes per
	hour). No LEV required.

Risk Management Measures

Measures related to personal protective equipment (PPE), hygiene and health evaluation	See section 8 of the SDS of this product for specifications. Training of workers in relation to proper use and maintenance of PPEs must be ensured.
Environmental	Prevent that undiluted product reaches surface waters.
measures	If appropriate AISE SPERC 8a.1.a.v2 may apply : wide dispersive use resulting in release to municipal sewage treatment plant.

Additional good practice advice

Don't eat or drink. Don't smoke. Don't use in proximity of open flame.	
Wash hands after use. Avoid contact with damaged skin. Do not mix with other products.	
Spillage instructions	Dilute with fresh water and mop up.
Hygiene practices	Follow the product instructions as specified on the label or in the product information sheet and use good occupational hygiene practices as specified in Section 7 of the product SDS.

Additional information depending on product composition

The label and (when required) the Safety Data Sheet contain additional, product specific information crucial for working safely with mixtures. Please refer to the product label and SDS for information including, but not limited to: product hazard classification, potentially allergenic fragrances, notable ingredients and threshold limit values (when available).

Disclaimer

This is a document for communicating generic conditions of safe use of a product. It is the responsibility of the formulator to link this SUMI to the SDS of a specific product that he is selling.

If a SUMI (or associated SWED) code is mentioned in the SDS of a product, the formulator of that product declares that all substances in the mixture are present in such concentration, that the use of the product within the conditions of the SUMI is safe. When available, this safe use is ensured by evaluating the results of the chemical safety assessments as performed by the raw material suppliers. When no chemical safety assessment has been carried out by the supplier for an ingredient that contributes to the classification of the mixture, the formulator has performed a safety assessment himself.

Following Occupational Health legislation, the employer of workers that use products that are assessed as safe following SUMI conditions remains responsible for communicating relevant use information to employees. When developing workplace instructions for employees, SUMI Sheets should always be considered in combination with the SDS and the label of the product.

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SUMI

Safe Use of Mixtures Information





AISE_SUMI_IS_8b_1

Version 1.1, August 2018

Transfer and dilution of concentrated product by using dedicated dosing system

This document is intended to communicate the conditions of safe use for the product and should always be read in combination with the product's Safety Data Sheet and labels.

General description of the process covered

This SUMI applies to industrial uses where products are transferred to or diluted in a dedicated dosing system. This Safe Use Information is based on the AISE_SWED_IS_8b_1_L and AISE_SWED_IS_8b_1_S

Operational Conditions

Maximum duration	60 minutes per day.
Range of application /	Indoor Use.
Process conditions	Process carried out at room temperature.
	In case of dilution, tap water at a maximum temperature of 45°C is used.
Air exchange rate	Provide a basic standard of general ventilation (1 to 3 air changes per
	hour). No LEV required.

Risk Management Measures

Measures related to	Wear suitable gloves.
personal protective equipment (PPE), hygiene and health evaluation	See section 8 of the SDS of this product for specifications.
	Training of workers in relation to proper use and maintenance of PPEs
	must be ensured.
Environmental	Prevent that undiluted product reaches surface waters.
measures	If appropriate AISE SPERC 8a.1.a.v2 may apply: wide dispersive use
	resulting in release to municipal sewage treatment plant.

Additional good practice advice

Don't eat or drink. Don't smoke. Don't use in proximity of open flame.	
Wash hands after use. Avoid contact with damaged skin. Do not mix with other products.	
Spillage instructions	Dilute with fresh water and mop up.
Hygiene practices	Follow the product instructions as specified on the label or in the product information sheet and use good occupational hygiene practices as specified in Section 7 of the product SDS.

Additional information depending on product composition

The label and (when required) the Safety Data Sheet contain additional, product specific information crucial for working safely with mixtures. Please refer to the product label and SDS for information including, but not limited to: product hazard classification, potentially allergenic fragrances, notable ingredients and threshold limit values (when available).

Disclaimer

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If a SUMI (or associated SWED) code is mentioned in the SDS of a product, the formulator of that product declares that all substances in the mixture are present in such concentration, that the use of the product within the conditions of the SUMI is safe. When available, this safe use is ensured by evaluating the results of the chemical safety assessments as performed by the raw material suppliers. When no chemical safety assessment has been carried out by the supplier for an ingredient that contributes to the classification of the mixture, the formulator has performed a safety assessment himself.

Following Occupational Health legislation, the employer of workers that use products that are assessed as safe following SUMI conditions remains responsible for communicating relevant use information to employees. When developing workplace instructions for employees, SUMI Sheets should always be considered in combination with the SDS and the label of the product.

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SUMI

Safe Use of Mixtures Information





AISE_SUMI_PW_8a_1_G

Version 1.1, August 2018

Transfer of product to a container (bottle/bucket/machine)

This document is intended to communicate the conditions of safe use for the product and should always be read in combination with the product's Safety Data Sheet and labels.

General description of the process covered

This SUMI applies to professional uses where the product is transferred to or diluted in a container, such as a dispenser, bottle or bucket. Safe Use Information is based on the AISE_SWED_PW_8a_1_L and AISE_SWED_PW_8a_1_S.

Operational Conditions

Maximum duration	60 minutes per day.
Range of application /	Indoor Use.
Process conditions	Process carried out at room temperature.
	In case of dilution, tap water at a maximum temperature of 45°C is used.
Air exchange rate	Provide a basic standard of general ventilation (1 to 3 air changes per
	hour). No LEV required.

Risk Management Measures

Measures related to	Wear suitable gloves and eye protection.
personal protective	See section 8 of the SDS of this product for specifications.
equipment (PPE),	
hygiene and health evaluation	
CValdation	Training of workers in relation to proper use and maintenance of PPEs
	must be ensured.
Environmental	Prevent that undiluted product reaches surface waters.
measures	If appropriate AISE SPERC 8a.1.a.v2 may apply: wide dispersive use
	resulting in release to municipal sewage treatment plant.

Additional good practice advice

Don't eat or drink. Don't smoke. Don't use in proximity of open flame.	
Wash hands after use. Avoid contact with damaged skin. Do not mix with other products.	
Spillage instructions	Dilute with fresh water and mop up.
Hygiene practices	Follow the product instructions as specified on the label or in the product information sheet and use good occupational hygiene practices as specified in Section 7 of the product SDS.

Additional information depending on product composition

The label and (when required) the Safety Data Sheet contain additional, product specific information crucial for working safely with mixtures. Please refer to the product label and SDS for information including, but not limited to: product hazard classification, potentially allergenic fragrances, notable ingredients and threshold limit values (when available).

Disclaimer

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If a SUMI (or associated SWED) code is mentioned in the SDS of a product, the formulator of that product declares that all substances in the mixture are present in such concentration, that the use of the product within the conditions of the SUMI is safe. When available, this safe use is ensured by evaluating the results of the chemical safety assessments as performed by the raw material suppliers. When no chemical safety assessment has been carried out by the supplier for an ingredient that contributes to the classification of the mixture, the formulator has performed a safety assessment himself.

Following Occupational Health legislation, the employer of workers that use products that are assessed as safe following SUMI conditions remains responsible for communicating relevant use information to employees. When developing workplace instructions for employees, SUMI Sheets should always be considered in combination with the SDS and the label of the product.

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SUMI

Safe Use of Mixtures Information





AISE_SUMI_PW_11_4

Version 1.1, August 2018

Professional uses; Spraying

This document is intended to communicate the conditions of safe use for the product and should always be read in combination with the product's Safety Data Sheet and labels.

General description of the process covered

This SUMI applies to professional uses of products in a spraying application. This Safe Use Information is based on the AISE_SWED_PW_11_4.

Operational Conditions

Maximum duration	480 minutes per day.	
Range of application /	Indoor Use.	
Process conditions	Process carried out at room temperature.	
	In case of dilution, tap water at a maximum temperature of 45°C is used.	
Air exchange rate	Provide a basic standard of general ventilation (1 to 3 air changes per	
	hour). No LEV required.	

Risk Management Measures

Measures related to	See section 8 of the SDS of this product for specifications.
personal protective	
equipment (PPE),	Training of workers in relation to proper use and maintenance of PPEs
hygiene and health	must be ensured.
evaluation	
Environmental	Prevent that undiluted product reaches surface waters.
measures	If appropriate AISE SPERC 8a.1.a.v2 may apply: wide dispersive use
	resulting in release to municipal sewage treatment plant.

Additional good practice advice

Don't eat or drink. Don't smoke. Don't use in proximity of open flame.	
Wash hands after use. Avoid contact with damaged skin. Do not mix with other products.	
Spillage instructions	Dilute with fresh water and mop up.
Hygiene practices	Follow the product instructions as specified on the label or in the product information sheet and use good occupational hygiene practices as specified in Section 7 of the product SDS.

Additional information depending on product composition

The label and (when required) the Safety Data Sheet contain additional, product specific information crucial for working safely with mixtures. Please refer to the product label and SDS for information including, but not limited to: product hazard classification, potentially allergenic fragrances, notable ingredients and threshold limit values (when available).

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WORKING ISTRUCTION TABLE



This tab provides instructions for appropriate and safe use of products and proper management of emergency situations for cleaning staff/users.

Attached to MSDS rel#5 09/25/20

Use description	Industrial spraying[PROC7], Transfer of substance or preparation (charging/ discharging) from/to vessels/large containers at non-dedicated facilities[PROC8A], Transfer of substance or preparation (charging/discharging) from/to ves- sels/large containers at dedicated facilities[PROC8B], Non industrial spraying[PROC11]
Product name	STERIFOAM
Classification of the product (100%)	H315 - Causes skin irritation. H318 - Causes serious eye damage. H400 - Very toxic to aquatic life. H411 - Toxic to aquatic life with long lasting effects
Classification of the diluted product (maximum use concentration)	At maximux concentration of use (6%) the product is classified:
concentration)	Not hazardous according to Regulation (EC) No 1272/2008
Handling of the product (100%)	Avoid contact and inhalation of vapors Wear protective gloves and eye/face protection. At work do not eat or drink.
Handling of the diluted product	At work do not eat or drink.
DPI required concentrated use, spillage)	Chemical resistant protective gloves (EN 374-1/EN374-2/EN374-3), safety glasses (EN 166).
Diluited product	No DPI required for intended uses

In case of emergency (accidents involving exposure to the product) Accidental release large quantities measures: concentrated product	Immediately inform the customer. Immediately inform the employer. Contact Poisons Centres tel. number in 1.4 section of the MSDS Wear gloves, glasses and protective clothing (for specifications refer to section 8.2. SDS) Possibly absorb it with inert materia or sucked it. After wiping up, wash with water the area and materials involved
Diluited product	Wear gloves, glasses and protective clothing (for specifications refer to section 8.2. SDS) After wiping up, wash with water the area and materials involved
Storage of the product	Keep in original container closed tightly. Do not store in open or unlabelled containers. Keep containers upright and safe by avoiding the possibility of falls or collisions. Store in a cool and dry place, away from heat sources and direct exposure to sunlight.
In case of accidents, emergency or fire	Immediately inform the customer. Follow company emergency instruction.