

Product name: VARISOFT EQ 100

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 100

Chemical name:

Esterquat

Additional identification

Chemical name:

1-Propanaminium, 2-hydroxy-N-(2-hydroxypropyl)-N,N-dimethyl-, esters with fatty acids, C18 unsatd., Me sulfates (salts)

Chemical formula:

-

INDEX No.

-

CAS-No.

1474044-71-7

EC No.

939-685-4

REACH Registration No.

01-2119983493-26-0000

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 : Evonik Operations GmbH
Rellinghauser Str. 1-11
45128 Essen
Germany

Telephone : +49 201 173 01

Fax : +49 201 173 3000

E-mail : productsafety-cs@evonik.com

1.4 Emergency telephone number:

24-Hour Health : +49 2365 49 2232

Emergency : +49 2365 49 4423 (Fax)

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.

Health Hazards

Skin irritation

Category 2

H315: Causes skin irritation.

Serious eye damage

Category 1

H318: Causes serious eye damage.

Environmental Hazards

Product name: VARISOFT EQ 100

Chronic hazards to the aquatic environment

Category 3

H412: Harmful to aquatic life with long lasting effects.

2.2 Label Elements
Contains: 1-Propanaminium, 2-hydroxy-N-(2-hydroxypropyl)-N,N-dimethyl-, esters with fatty acids, C18 unsatd., Me sulfates (salts)

Signal Words: Danger

Hazard Statement(s): H315: Causes skin irritation.
 H318: Causes serious eye damage.
 H412: Harmful to aquatic life with long lasting effects.

Precautionary Statements
Prevention: P273: Avoid release to the environment.
 P280: Wear protective gloves/protective clothing/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 or doctor/ physician.

2.3 Other hazards

None known.

Results of PBT and vPvB 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.

SECTION 3: Composition/information on ingredients
Chemical name:
 Esterquat

3.1 Substances
Chemical name 1-Propanaminium, 2-hydroxy-N-(2-hydroxypropyl)-N,N-dimethyl-, esters with fatty acids, C18 unsatd., Me sulfates (salts)

INDEX No.:
CAS-No.: 1474044-71-7

EC No.: 939-685-4

REACH Registration No.: 01-2119983493-26-0000

Chemical name	Concentration	CAS-No.	EC No.	REACH Registration No.	M-Factor:	Notes
1-Propanaminium, 2-hydroxy-N-(2-hydroxypropyl)-N,N-dimethyl-,	<=100%	1474044-71-7	939-685-4	01-2119983493-26	No data available.	

Product name: VARISOFT EQ 100

esters with fatty acids, C18 unsatd., Me sulfates (salts)						
---	--	--	--	--	--	--

* 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
1-Propanaminium, 2-hydroxy-N-(2-hydroxypropyl)-N,N-dimethyl-, esters with fatty acids, C18 unsatd., Me sulfates (salts)	Classification: Skin Irrit.: 2: H315; Eye Dam.: 1: H318; Aquatic Chronic: 3: H412; Supplemental label information: None known. Specific concentration limit: None known. Acute toxicity, oral: LD 50: > 2,000 mg/kg Acute toxicity, inhalation: None known. Acute toxicity, dermal: LD 50: > 2,000 mg/kg	No data available.

CLP: Regulation No. 1272/2008.

SECTION 4: First aid measures

4.1 Description of necessary first-aid measures

General information: Remove contaminated clothing immediately and store/dispose of safely

Inhalation: Bring affected person outside and ensure that he/she is comfortable. In case of discomfort: Supply with medical care.

Skin Contact: In case of contact with skin wash off immediately with plenty of water. If skin irritation persists, call a physician.

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. Call for medical advice immediately; show this safety data sheet

Personal Protection for First-aid Responders: No data available.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms: The following symptoms may occur: - gastrointestinal complaints

Hazards: No data available.

4.3 Indication of immediate medical attention and special treatment needed

Treatment: Treat symptomatically.

SECTION 5: Firefighting measures

Product name: VARISOFT EQ 100

General Fire Hazards: Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. Cool endangered containers with water spray jet.

5.1 Extinguishing media

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

Unsuitable extinguishing media: High volume water jet.

5.2 Special hazards arising from the substance or mixture: In the event of fire the following can be released: - Nitrogen oxides (NOx) - Sulphur oxides - carbon dioxide, carbon monoxide Under certain conditions of combustion traces of other toxic substances cannot be excluded

5.3 Advice for firefighters

Special fire fighting procedures: Cool endangered containers by water spray Vapours may form explosive mixtures with air.

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

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.

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 Prevent product from getting into subsoil/soil.

6.3 Methods and material for containment and cleaning up: Pick up with absorbent material (e.g. general-purpose binder). 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

Technical measures (e.g. Local and general ventilation): No data available.

Product name: VARISOFT EQ 100

Safe handling advice: Do not inhale gases/vapours/aerosols. Avoid contact with skin and eyes. When working with the product vapors/aerosols may be evolved; therefore a local exhaust and ventilation are recommended.

Contact avoidance measures: No data available.

7.2 Conditions for safe storage, including any incompatibilities

Safe storage conditions: Keep container tightly closed and in a well-ventilated place.

Safe packaging materials: No data available.

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

SECTION 8: Exposure controls/personal protection

8.1 Control Parameters

Occupational Exposure Limits

None of the components have assigned exposure limits.

Biological Limit Values

No biological exposure limits noted for the ingredient(s).

DNEL-Values

Remarks: DNEL-Values

Critical component	Type	Route of Exposure	Health Warnings	Remarks
1-Propanaminium, 2-hydroxy-N-(2-hydroxypropyl)-N,N-dimethyl-, esters with fatty acids, C18 unsatd., Me sulfates (salts)	General population	Dermal	Systemic, long-term; 56.25 mg/kg	Effect on fertility
	General population	Inhalation	Systemic, long-term; 2.17 mg/m ³	Effect on fertility
	Workers	Eyes	Local effects;	Medium hazard (no threshold derived).
	Workers	Dermal	Systemic, long-term; 112.5 mg/kg	Effect on fertility
	General population	Oral	Systemic, long-term; 1.25 mg/kg	Effect on fertility
	General population	Eyes	Local effects;	Medium hazard (no threshold derived).
	Workers	Inhalation	Systemic, long-term; 8.72 mg/m ³	Effect on fertility

PNEC-Values

Remarks: PNEC-Values

Critical component	Environmental compartment	PNEC-Values	Remarks
1-Propanaminium, 2-hydroxy-N-(2-hydroxypropyl)-N,N-dimethyl-, esters with fatty acids, C18 unsatd., Me sulfates (salts)	marine water	0.002 mg/l	
	freshwater sediment	1.7 mg/kg	
	freshwater	0.017 mg/l	
	Soil	0.331 mg/kg	
	Sewage treatment plant	10 mg/l	
	marine water sediment	0.17 mg/kg	

Product name: VARISOFT EQ 100

8.2 Exposure controls

Appropriate Engineering Controls: No data available.

Individual protection measures, such as personal protective equipment

Eye/face protection: Protective goggles; wear additional face protection if risk is increased.

Hand Protection: Additional Information: Examples of suitable gloves are those made by the company Kächele-Cama Latex GmbH, Am Kreuzacker 9, D-36124 Eichenzell, e-mail vertrieb@kcl.de, with subsequent specification (test according to EN374); specific workplace conditions must be separately taken into account., These recommendations apply only to the product mentioned in the material data safety sheet that we supply and the purpose that we indicate., The protective gloves to be worn must satisfy the specifications of Regulation (EU) 2016/425 and the resulting Standard EN374.

Material: gloves made of natural latex

Break-through time: > 480 min

Glove thickness: 0.5 mm

Material: gloves made of chloroprene (CR, e.g. Neoprene)

Break-through time: > 480 min

Glove thickness: 0.65 mm

Material: gloves made of nitril (NBR)

Break-through time: > 480 min

Glove thickness: >= 0.11 mm

Material: protective gloves made of fluorinated rubber (FKM, e.g. Viton)

Break-through time: > 480 min

Glove thickness: 0.7 mm

Material: gloves made of butyl

Break-through time: > 480 min

Glove thickness: 0.3 mm

Skin and Body Protection: light protective clothing a protective ointment is recommended.

Respiratory Protection: in case of formation of vapours/aerosols: Respiratory protection mask with combination filter A-P2

Hygiene measures: Remove soiled or soaked clothing immediately. Keep away from foodstuffs and beverages. 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: liquid
Form: Viscous Liquid
Color: Yellow

Odor: Characteristic

Odor Threshold: not measured

Freezing point: (OECD 102) not determinable

Boiling Point: (OECD 103) not determinable

Flammability: No data available.

Product name: VARISOFT EQ 100

Upper/lower limit on flammability or explosive limits

Explosive limit - upper:	not measured
Explosive limit - lower:	not measured
Flash Point:	147 °C (Pensky-Martens Closed Cup)
Self Ignition Temperature:	not measured
Decomposition Temperature:	not measured
pH:	6.0 - 7.5 (10 g/l, 20 °C) Isopropanol/Water
Viscosity	
Dynamic viscosity:	> 17,000 mPa.s 20 °C, OECD 114)
Kinematic viscosity:	No data available.
Flow Time:	> 4 min 23 °C 6 mm
	Method: DIN EN 535 (ISO 2431)

Solubility(ies)

Solubility in Water:	100 g/l (20 °C) Dispersible 1.22 mg/l (20 °C, ASTM E 1148 - 02) Sparingly Soluble Main component(s)
Solubility (other):	not measured
Partition coefficient (n-octanol/water):	not measured
Vapor pressure:	< 1 hPa (20 °C) (OECD 104)
Relative density:	No data available.
Density:	Approximate 1 g/cm ³ (20 °C) (DGF-C-IV-2)
Bulk density:	Not applicable
Relative vapor density:	not measured
Particle characteristics	
Particle Size Distribution:	Not applicable
Specific surface area:	Not applicable
Surface charge/Zeta potential:	Not applicable
Assessment:	Not applicable
Shape:	Not applicable
Crystallinity:	Not applicable
Surface treatment:	Not applicable

9.2 Other information

Explosive properties:	Not explosive
Oxidizing properties:	not measured
Minimum ignition temperature:	340 °C (DIN 51794)
Metal Corrosion:	not measured
Evaporation Rate:	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.

Product name: VARISOFT EQ 100

10.3 Possibility of hazardous reactions:	Evolution of explosive gases/vapours.
10.4 Conditions to avoid:	Unknown
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 hazard classes as defined in Regulation (EC) No 1272/2008
Acute toxicity (list all possible routes of exposure)
Oral

Product:	LD 50 (Rat): > 2,000 mg/kg (OECD 402)
Components:	
1-Propanaminium, 2-hydroxy-N-(2-hydroxypropyl)-N,N-dimethyl-, esters with fatty acids, C18 unsatd., Me sulfates (salts)	LD 50 (Rat) : > 2,000 mg/kg No classification

Dermal

Product:	LD 50 (Rat): > 2,000 mg/kg
Components:	
1-Propanaminium, 2-hydroxy-N-(2-hydroxypropyl)-N,N-dimethyl-, esters with fatty acids, C18 unsatd., Me sulfates (salts)	LD 50 (Rat) : > 2,000 mg/kg No classification

Inhalation

Product:	Not classified for acute toxicity based on available data.
Components:	
1-Propanaminium, 2-hydroxy-N-(2-hydroxypropyl)-N,N-dimethyl-, esters with fatty acids, C18 unsatd., Me sulfates (salts)	Vapour, No data available. Dusts, mists and fumes, No data available.

Product name: VARISOFT EQ 100

Repeated dose toxicity

Product: NOAEL (Rat, Oral): 500 mg/kg
NOAEL (Rat): > 500 mg/kg

Components:
1-Propanaminium, 2-hydroxy-N-(2-hydroxypropyl)-N,N-dimethyl-, esters with fatty acids, C18 unsatd., Me sulfates (salts) NOAEL (Rat): > 500 mg/kg

Skin Corrosion/Irritation

Product: Irritating. OECD 404 (Rabbit): Irritating.;

Components:
1-Propanaminium, 2-hydroxy-N-(2-hydroxypropyl)-N,N-dimethyl-, esters with fatty acids, C18 unsatd., Me sulfates (salts) OECD 404 (Rabbit): Irritating.

Serious Eye Damage/Eye Irritation

Product: Risk of serious damage to eyes. Rabbit: Risk of serious damage to eyes.

Components:
1-Propanaminium, 2-hydroxy-N-(2-hydroxypropyl)-N,N-dimethyl-, esters with fatty acids, C18 unsatd., Me sulfates (salts) Risk of serious damage to eyes. OECD 405 Rabbit:

Respiratory or Skin Sensitization

Product: , Magnussona i Kligmana. (Guinea Pig) Non sensitising
Magnussona i Kligmana., OECD 406 (Guinea Pig): Not a skin sensitizer.

Components:
1-Propanaminium, 2-hydroxy-N-(2-hydroxypropyl)-N,N-dimethyl-, esters with fatty acids, C18 unsatd., Me sulfates (salts) Magnussona i Kligmana., OECD 406 (Guinea Pig): Not a skin sensitizer.

Carcinogenicity

Product: No data available.

Components:
1-Propanaminium, 2-hydroxy-N-(2-hydroxypropyl)-N,N-dimethyl-, esters with fatty acids, C18 unsatd., Me sulfates (salts) No data available.

Germ Cell Mutagenicity

No data available.

Product name: VARISOFT EQ 100

In vitro

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

Components:

1-Propanaminium, 2-hydroxy-N-(2-hydroxypropyl)-N,N-dimethyl-, esters with fatty acids, C18 unsatd., Me sulfates (salts) Ames test (OECD 471): negative
gene mutation test (OECD 476): negative (analogy)
Chromosomal aberration (OECD 473): negative (analogy)

In vivo

Product: No data available.

Components:

1-Propanaminium, 2-hydroxy-N-(2-hydroxypropyl)-N,N-dimethyl-, esters with fatty acids, C18 unsatd., Me sulfates (salts) No data available.

Reproductive toxicity

Product: No data available.

Components:

1-Propanaminium, 2-hydroxy-N-(2-hydroxypropyl)-N,N-dimethyl-, esters with fatty acids, C18 unsatd., Me sulfates (salts) No data available.

Specific Target Organ Toxicity - Single Exposure

Product: No data available.

Components:

1-Propanaminium, 2-hydroxy-N-(2-hydroxypropyl)-N,N-dimethyl-, esters with fatty acids, C18 unsatd., Me sulfates (salts) No data available.

Specific Target Organ Toxicity - Repeated Exposure

Product: No data available.

Components:

1-Propanaminium, 2-hydroxy-N-(2-hydroxypropyl)-N,N-dimethyl-, esters with fatty acids, C18 unsatd., Me sulfates (salts) No data available.

Aspiration Hazard

Product: Not classified

Components:

Product name: VARISOFT EQ 100

1-Propanaminium, 2-hydroxy-N-(2-hydroxypropyl)-N,N-dimethyl-, esters with fatty acids, C18 unsatd., Me sulfates (salts) Not classified

11.2 Information on other hazards
Endocrine disrupting properties

Product: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.;

Components:
 1-Propanaminium, 2-hydroxy-N-(2-hydroxypropyl)-N,N-dimethyl-, esters with fatty acids, C18 unsatd., Me sulfates (salts) No data available.

Other hazards

Product: Regulation (EC) No. 1272/2008 Causes skin irritation. Causes serious eye damage.;

SECTION 12: Ecological information

12.1 Toxicity:
Acute hazards to the aquatic environment:
Fish

Product: LC 50 (Cyprinus carpio (Carp), 96 h): > 10 mg/l

Components:
 1-Propanaminium, 2-hydroxy-N-(2-hydroxypropyl)-N,N-dimethyl-, esters with fatty acids, C18 unsatd., Me sulfates (salts) LC 50 (Cyprinus carpio (Carp), 96 h): > 10 mg/l

Aquatic Invertebrates

Product: EC 50 (Daphnia magna, 48 h): > 8.6 mg/l

Components:
 1-Propanaminium, 2-hydroxy-N-(2-hydroxypropyl)-N,N-dimethyl-, esters with fatty acids, C18 unsatd., Me sulfates (salts) EC 50 (Daphnia magna, 48 h): > 8.6 mg/l

Toxicity to Aquatic Plants

Product: EC 50 (Algae (Pseudokirchneriella subcapitata), 72 h): 1.2 mg/l (OECD 201)

Components:
 1-Propanaminium, 2-hydroxy-N-(2-hydroxypropyl)-N,N-

EC 50 (Algae (Pseudokirchneriella subcapitata), 72 h): 1.2 mg/l (OECD 201)

Product name: VARISOFT EQ 100

dimethyl-, esters with
fatty acids, C18 unsatd.,
Me sulfates (salts)

Toxicity to microorganisms

Product: EC 50 (activated sludge, 6 d): 100 mg/l

Components:
1-Propanaminium, 2-
hydroxy-N-(2-
hydroxypropyl)-N,N-
dimethyl-, esters with
fatty acids, C18 unsatd.,
Me sulfates (salts) No data available.

Chronic hazards to the aquatic environment:

Fish

Product: NOEC (Pimephales promelas, 35 d): 0.686 mg/l

Components:
1-Propanaminium, 2-
hydroxy-N-(2-
hydroxypropyl)-N,N-
dimethyl-, esters with
fatty acids, C18 unsatd.,
Me sulfates (salts) NOEC (Pimephales promelas, 35 d): 0.686 mg/l (analogy)

Aquatic Invertebrates

Product: NOEC (Daphnia magna, 21 d): 1 mg/l This information is derived from evaluation of or a test result for a similar compound (conclusion based on analogy).

Components:
1-Propanaminium, 2-
hydroxy-N-(2-
hydroxypropyl)-N,N-
dimethyl-, esters with
fatty acids, C18 unsatd.,
Me sulfates (salts) NOEC (Daphnia magna, 21 d): 1 mg/l (analogy)

Toxicity to Aquatic Plants

Product: NOEC (Algae (Pseudokirchneriella subcapitata), 72 h): 0.39 mg/l (OECD 201)

Components:
1-Propanaminium, 2-
hydroxy-N-(2-
hydroxypropyl)-N,N-
dimethyl-, esters with
fatty acids, C18 unsatd.,
Me sulfates (salts) NOEC (Algae (Pseudokirchneriella subcapitata), 72 h): 0.39 mg/l (OECD 201)

Toxicity to microorganisms

Product: No data available.

Components:
1-Propanaminium, 2-
hydroxy-N-(2-
hydroxypropyl)-N,N-
dimethyl-, esters with
fatty acids, C18 unsatd.,
Me sulfates (salts) No data available.

Product name: VARISOFT EQ 100

12.2 Persistence and Degradability

Biodegradation

Product: aerobic (28 d, OECD 301 F): > 60 % Readily biodegradable Own study
 Readily biodegradable, according to appropriate OECD test.
 anaerobic (60 d, OECD 311): > 60 % Own study

Components:

1-Propanaminium, 2-hydroxy-N-(2-hydroxypropyl)-N,N-dimethyl-, esters with fatty acids, C18 unsatd., Me sulfates (salts) Manometric Respirometry Test (28 d, OECD 301 F): > 60 % Own study
 The product is easily biodegradable.
 anaerobic (60 d, OECD 311): > 60 % Own study The product is easily biodegradable.

BOD/COD Ratio

Product: No data available.

Components:

1-Propanaminium, 2-hydroxy-N-(2-hydroxypropyl)-N,N-dimethyl-, esters with fatty acids, C18 unsatd., Me sulfates (salts) No data available.

12.3 Bioaccumulative potential

Bioconcentration Factor (BCF)

Product: No data available.

Components:

1-Propanaminium, 2-hydroxy-N-(2-hydroxypropyl)-N,N-dimethyl-, esters with fatty acids, C18 unsatd., Me sulfates (salts) No data available.

Partition Coefficient n-octanol / water (log Kow)

Product: Log Kow: not measured

Components:

1-Propanaminium, 2-hydroxy-N-(2-hydroxypropyl)-N,N-dimethyl-, esters with fatty acids, C18 unsatd., Me sulfates (salts) No data available.

12.4 Mobility in soil:

Product No data available.

Components:

1-Propanaminium, 2-hydroxy-N-(2-hydroxypropyl)-N,N-dimethyl-, esters with fatty acids, C18 unsatd., Me sulfates (salts) No data available.

12.5 Results of PBT and vPvB assessment:

Product name: VARISOFT EQ 100

Product 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.

Components:
1-Propanaminium, 2-hydroxy-N-(2-hydroxypropyl)-N,N-dimethyl-, esters with fatty acids, C18 unsatd., Me sulfates (salts) Non-classified vPvB substance
Non-classified PBT substance

12.7 Other adverse effects:

Other hazards

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

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/ID No.

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

Remarks : FOR USA ONLY: In packagings > 450 L this Product must be classified, placarded, marked and shipped as Combustible Liquid in the USA.

14.7 Maritime transport in bulk according to IMO instruments

Not applicable for product as supplied.

Product name: VARISOFT EQ 100

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: A substance safety assessment was carried out for this product.

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.

Training information: Comply with national laws regulating employee instruction.

Other information: This surfactant complies with the conditions of biodegradability as provided for in (EC) Ordinance No. 648/2004 for detergents. Documents confirming this shall be made available to the responsible authorities of the member countries and shall be provided to them on request or if so requisitioned by a detergent manufacturer.

Revision Information Changes since the last version are highlighted in the margin. This version replaces all previous versions.

Product name: VARISOFT EQ 100

Disclaimer:

This information and all further technical advice is based on our present knowledge and experience. However, it implies no liability or other legal responsibility on our part, including with regard to existing third party intellectual property rights, especially patent rights. In particular, no warranty, whether express or implied, or guarantee of product properties in the legal sense is intended or implied. We reserve the right to make any changes according to technological progress or further developments. The customer is not released from the obligation to conduct careful inspection and testing of incoming goods. Performance of the product described herein should be verified by testing, which should be carried out only by qualified experts in the sole responsibility of a customer. Reference to trade names used by other companies is neither a recommendation, nor does it imply that similar products could not be used.

Annex to the extended Safety Data Sheet (eSDS)

Content

Exposure Scenario I.	Formulation into mixture
Exposure Scenario II.	Use at industrial site leading to inclusion into/onto article, Textile dyes and impregnating products
Exposure Scenario III.	Polishes and wax blends, Professional uses
Exposure Scenario IV.	Polishes and wax blends, Consumer uses
Exposure Scenario V.	Cosmetics, personal care products

Exposure Scenario

I.

Exposure scenario worker

1. Formulation into mixture

List of use descriptors

Sector(s) of use	SU3: Industrial uses: Uses of substances as such or in preparations at industrial sites
Product categories [PC]:	

Name of contributing environmental scenario and corresponding ERC

Formulation into mixture:
ERC2: Formulation into mixture

List of names of contributing worker scenarios and corresponding PROCs

Formulation into mixture:
PROC1: Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions

Formulation into mixture:
PROC2: Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions

Formulation into mixture:
PROC3: Manufacture or formulation in the chemical industry in

Product name: VARISOFT EQ 100

	<p>closed batch processes with occasional controlled exposure or processes with equivalent containment condition</p> <p><u>Formulation into mixture:</u> PROC4: Chemical production where opportunity for exposure arises</p> <p><u>Formulation into mixture:</u> PROC5: Mixing or blending in batch processes</p> <p><u>Formulation into mixture:</u> PROC8a: Transfer of substance or mixture (charging and discharging) at non-dedicated facilities</p> <p><u>Formulation into mixture:</u> PROC8b: Transfer of substance or mixture (charging and discharging) at dedicated facilities</p> <p><u>Formulation into mixture:</u> PROC9: Transfer of substance or mixture into small containers (dedicated filling line, including weighing)</p> <p><u>Formulation into mixture:</u> : Use as laboratory reagent</p>
--	---

2.1. Contributing exposure scenario controlling environmental exposure for: Formulation into mixture

--

Product characteristics

Physical state	
-----------------------	--

Viscosity:

Kinematic viscosity:	This information is not available.
Dynamic viscosity:	This information is not available.

Amounts used

Daily amount per site	4500 kg
Annual amount per site	450 t(tonnes)/year

Frequency and duration of use

Batch process:	not relevant
Continuous process:	not relevant

Environment factors not influenced by risk management

Flow rate of receiving surface water (m³/d):	18,000 m3/d
Local freshwater dilution factor	10

Product name: VARISOFT EQ 100

Local marine water dilution factor	not relevant
---	--------------

Other given operational conditions affecting environmental exposure

type	Emission days	Emission factors			Remarks
		Air	Soil	Water	
		0 %	0.01 %	0.017 %	

Other relevant operational conditions	not relevant
--	--------------

Risk management measures (RMM)
Technical conditions and measures at process level (source) to prevent release

See chapter 8 of the safety data sheet (Environmental exposure controls).

Technical onsite conditions and measures to reduce or limit discharges, air emissions and releases to soil

Air	not relevant
Soil	not relevant
Water	not relevant
Sediment:	not relevant
Remarks:	not relevant

Organisational measures to prevent/limit release from site:

none

Conditions and measures related to sewage treatment plant

Size of municipal sewage system/treatment plant (m³/d):	
type:	Municipal Sewage Treatment Plant
Discharge rate:	2,000 m ³ /d
Treatment effectiveness:	91.7 %
Sludge treatment technique:	Controlled application to agricultural soil.
Measures to limit air emissions:	not relevant
Remarks:	not relevant

Conditions and measures related to external treatment of waste for disposal

This information is not available.

Conditions and measures related to external recovery of waste

This information is not available.

Additional good practice advice beyond the REACH CSA

This information is not available.

Product name: VARISOFT EQ 100

2.2. Contributing exposure scenario controlling worker exposure for: Formulation into mixture
Process Categories:

PROC1: Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions

Product characteristics
Concentration of the substance in a mixture:

Covers percentage substance in the product up to 100 %.

Physical form of the product:

liquids

Vapour pressure:

not relevant

Process temperature:

not relevant

Remarks

not relevant

Amounts used
Frequency and duration of use

This information is not available.

Human factors not influenced by risk management
Exposed skin areas:
Palm of one hand

 240 cm²
Other given operational conditions affecting workers exposure

Area of use	Room size:	Temperature	Ventilation rate	Remarks
indoor		:	1	

Other relevant operational conditions:

not relevant

Risk management measures (RMM)

This information is not available.

Additional good practice advice beyond the REACH CSA

This information is not available.

2.3. Contributing exposure scenario controlling worker exposure for: Formulation into mixture
Process Categories:

PROC2: Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions

Product name: VARISOFT EQ 100

Product characteristics

Concentration of the substance in a mixture:	Covers percentage substance in the product up to 100 %.
Physical form of the product:	liquids
Vapour pressure:	not relevant
Process temperature:	not relevant
Remarks	not relevant

Amounts used

--

Frequency and duration of use

This information is not available.

Human factors not influenced by risk management
Exposed skin areas:

Palm of both hands	480 cm ²
--------------------	---------------------

Other given operational conditions affecting workers exposure

Area of use	Room size:	Temperature	Ventilation rate	Remarks
indoor		:	1	

Other relevant operational conditions:	not relevant
--	--------------

Risk management measures (RMM)

This information is not available.

Additional good practice advice beyond the REACH CSA

This information is not available.

2.4. Contributing exposure scenario controlling worker exposure for: Formulation into mixture

Process Categories:	PROC3: Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition
---------------------	---

Product characteristics

Concentration of the substance in a mixture:	Covers percentage substance in the product up to 100 %.
Physical form of the product:	liquids
Vapour pressure:	not relevant

Product name: VARISOFT EQ 100

Process temperature:	not relevant
Remarks	not relevant

Amounts used

--

Frequency and duration of use

This information is not available.

Human factors not influenced by risk management
Exposed skin areas:

Palm of one hand	240 cm ²
-------------------------	---------------------

Other given operational conditions affecting workers exposure

Area of use	Room size:	Temperature :	Ventilation rate	Remarks
indoor			1	

Other relevant operational conditions:	not relevant
---	--------------

Risk management measures (RMM)

This information is not available.

Additional good practice advice beyond the REACH CSA

This information is not available.

2.5. Contributing exposure scenario controlling worker exposure for: Formulation into mixture

Process Categories:	PROC4: Chemical production where opportunity for exposure arises
----------------------------	--

Product characteristics

Concentration of the substance in a mixture:	Covers percentage substance in the product up to 100 %.
---	---

Physical form of the product:	liquids
Vapour pressure:	not relevant
Process temperature:	not relevant
Remarks	not relevant

Amounts used

--

Product name: VARISOFT EQ 100

Frequency and duration of use

This information is not available.

Human factors not influenced by risk management

Exposed skin areas:

Palm of both hands	480 cm ²
--------------------	---------------------

Other given operational conditions affecting workers exposure

Area of use	Room size:	Temperature :	Ventilation rate	Remarks
indoor			1	

Other relevant operational conditions: not relevant

Risk management measures (RMM)

This information is not available.

Additional good practice advice beyond the REACH CSA

This information is not available.

2.6. Contributing exposure scenario controlling worker exposure for: Formulation into mixture

Process Categories: PROC5: Mixing or blending in batch processes

Product characteristics

Concentration of the substance in a mixture:	Covers percentage substance in the product up to 100 %.
---	---

Physical form of the product:	liquids
--------------------------------------	---------

Vapour pressure:	not relevant
-------------------------	--------------

Process temperature:	not relevant
-----------------------------	--------------

Remarks	not relevant
----------------	--------------

Amounts used

Frequency and duration of use

This information is not available.

Product name: VARISOFT EQ 100

Human factors not influenced by risk management
Exposed skin areas:

Palm of both hands	480 cm ²
--------------------	---------------------

Other given operational conditions affecting workers exposure

Area of use	Room size:	Temperature :	Ventilation rate	Remarks
indoor			1	

Other relevant operational conditions: not relevant

Risk management measures (RMM)

This information is not available.

Additional good practice advice beyond the REACH CSA

This information is not available.

2.7. Contributing exposure scenario controlling worker exposure for: Formulation into mixture

Process Categories: PROC8a: Transfer of substance or mixture (charging and discharging) at non-dedicated facilities

Product characteristics

Concentration of the substance in a mixture: Covers percentage substance in the product up to 100 %.

Physical form of the product:	liquids
Vapour pressure:	not relevant
Process temperature:	not relevant
Remarks	not relevant

Amounts used
Frequency and duration of use

This information is not available.

Product name: VARISOFT EQ 100

Human factors not influenced by risk management
Exposed skin areas:

Both hands	960 cm ²
------------	---------------------

Other given operational conditions affecting workers exposure

Area of use	Room size:	Temperature :	Ventilation rate	Remarks
indoor			1	

Other relevant operational conditions:	not relevant
---	--------------

Risk management measures (RMM)

This information is not available.

Additional good practice advice beyond the REACH CSA

This information is not available.

2.8. Contributing exposure scenario controlling worker exposure for: Formulation into mixture

Process Categories:	PROC8b: Transfer of substance or mixture (charging and discharging) at dedicated facilities
----------------------------	---

Product characteristics

Concentration of the substance in a mixture:	Covers percentage substance in the product up to 100 %.
---	---

Physical form of the product:	liquids
Vapour pressure:	not relevant
Process temperature:	not relevant
Remarks	not relevant

Amounts used

--

Frequency and duration of use

This information is not available.

Product name: VARISOFT EQ 100

Human factors not influenced by risk management
Exposed skin areas:

Both hands	960 cm ²
------------	---------------------

Other given operational conditions affecting workers exposure

Area of use	Room size:	Temperature :	Ventilation rate	Remarks
indoor			1	

Other relevant operational conditions:	not relevant
---	--------------

Risk management measures (RMM)

This information is not available.

Additional good practice advice beyond the REACH CSA

This information is not available.

2.9. Contributing exposure scenario controlling worker exposure for: Formulation into mixture

Process Categories:	PROC9: Transfer of substance or mixture into small containers (dedicated filling line, including weighing)
----------------------------	--

Product characteristics

Concentration of the substance in a mixture:	Covers percentage substance in the product up to 100 %.
---	---

Physical form of the product:	liquids
Vapour pressure:	not relevant
Process temperature:	not relevant
Remarks	not relevant

Amounts used

--

Frequency and duration of use

This information is not available.

Product name: VARISOFT EQ 100

Human factors not influenced by risk management
Exposed skin areas:

Palm of both hands	480 cm ²
--------------------	---------------------

Other given operational conditions affecting workers exposure

Area of use	Room size:	Temperature :	Ventilation rate	Remarks
indoor			1	

Other relevant operational conditions: not relevant

Risk management measures (RMM)

This information is not available.

Additional good practice advice beyond the REACH CSA

This information is not available.

2.10. Contributing exposure scenario controlling worker exposure for: Formulation into mixture

Process Categories: : Use as laboratory reagent

Product characteristics

Concentration of the substance in a mixture:	Covers percentage substance in the product up to 100 %.
--	---

Physical form of the product:	liquids
Vapour pressure:	not relevant
Process temperature:	not relevant
Remarks	not relevant

Amounts used
Frequency and duration of use

This information is not available.

Product name: VARISOFT EQ 100

Human factors not influenced by risk management
Exposed skin areas:

Palm of one hand	240 cm ²
------------------	---------------------

Other given operational conditions affecting workers exposure

Area of use	Room size:	Temperature :	Ventilation rate	Remarks
indoor			1	

Other relevant operational conditions: not relevant

Risk management measures (RMM)

This information is not available.

Additional good practice advice beyond the REACH CSA

This information is not available.

3. Exposure estimation
Environment:
Formulation into mixture:
ERC2:

Compartment	Predicted environmental concentration (PEC)	Risk characterization ratio (RCR)	Method	Remarks
Fresh water	0.003 mg/l	0.057	EUSES v2.1	none
freshwater sediment	3.074 mg/kg dry weight	0.555		none
marine water	0.0003 mg/l	0.057		none
Marine sediments	0.307 mg/kg dry weight	0.555		none
Sewage treatment plant	0.031 mg/l	0.031		none
soil	1.072 mg/kg dry weight	0.992		none

Product name: VARISOFT EQ 100

Health:
Formulation into mixture:
PROC1:

Route of Exposure	Specific condition	Exposure level	Risk characterisation ratio (RCR)	Method	Remarks
Worker - inhalative, long-term - systemic		0.332 mg/m ³	< 0.01	ECETOC TRA	none
Worker - dermal, long-term - systemic		0.034 mg/kg bw/day	< 0.01		none

Formulation into mixture:
PROC2:

Route of Exposure	Specific condition	Exposure level	Risk characterisation ratio (RCR)	Method	Remarks
Worker - inhalative, long-term - systemic		3.317 mg/m ³	0.091	ECETOC TRA	none
Worker - dermal, long-term - systemic		1.37 mg/kg bw/day	0.026		none
Worker - combined, long-term - systemic			0.118		none

Formulation into mixture:
PROC3:

Route of Exposure	Specific condition	Exposure level	Risk characterisation ratio (RCR)	Method	Remarks
Worker - inhalative, long-term - systemic		3.317 mg/m ³	0.091	ECETOC TRA	none
Worker - dermal, long-term - systemic		0.69 mg/kg bw/day	0.013		none
Worker - combined, long-term - systemic			0.105		none

Product name: VARISOFT EQ 100
Formulation into mixture:
PROC4:

Route of Exposure	Specific condition	Exposure level	Risk characterisation ratio (RCR)	Method	Remarks
Worker - inhalative, long-term - systemic		30317 mg/m ³	0.091	ECETOC TRA	none
Worker - dermal, long-term - systemic		6086 mg/kg bw/day	0.132		none
Worker - combined, long-term - systemic			0.223		none

Formulation into mixture:
PROC5:

Route of Exposure	Specific condition	Exposure level	Risk characterisation ratio (RCR)	Method	Remarks
Worker - inhalative, long-term - systemic		3.317 mg/m ³	0.091	ECETOC TRA	none
Worker - dermal, long-term - systemic		13.71 mg/kg bw/day	0.263		none
Worker - combined, long-term - systemic			0.355		none

Formulation into mixture:
PROC8a:

Route of Exposure	Specific condition	Exposure level	Risk characterisation ratio (RCR)	Method	Remarks
Worker - inhalative, long-term - systemic		3.317 mg/m ³	0.091	ECETOC TRA	none
Worker - dermal, long-term - systemic		13.71 mg/kg bw/day	0.263		none
Worker - combined, long-term - systemic			0.355		none

Product name: VARISOFT EQ 100
Formulation into mixture:
PROC8b:

Route of Exposure	Specific condition	Exposure level	Risk characterisation ratio (RCR)	Method	Remarks
Worker - inhalative, long-term - systemic		3.317 mg/m ³	0.091	ECETOC TRA	none
Worker - dermal, long-term - systemic		13.71 mg/kg bw/day	0.263		none
Worker - combined, long-term - systemic			0.355		none

Formulation into mixture:
PROC9:

Route of Exposure	Specific condition	Exposure level	Risk characterisation ratio (RCR)	Method	Remarks
Worker - inhalative, long-term - systemic		3.317 mg/m ³	0.091	ECETOC TRA	none
Worker - dermal, long-term - systemic		6.86 mg/kg bw/day	0.132		none
Worker - combined, long-term - systemic			0.233		none

Formulation into mixture:

:

Route of Exposure	Specific condition	Exposure level	Risk characterisation ratio (RCR)	Method	Remarks
Worker - inhalative, long-term - systemic		3.317 mg/m ³	0.091	ECETOC TRA	none
Worker - dermal, long-term - systemic		0.34 mg/kg bw/day	< 0.01		none
Worker - combined, long-term - systemic			0.098		none

Product name: VARISOFT EQ 100

4. Guidance to Downstream User to evaluate whether he works inside the boundaries set by the ES

Where other risk management measures/operational conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

Exposure Scenario

II.

Exposure scenario worker

1. Use at industrial site leading to inclusion into/onto article, Textile dyes and impregnating products

List of use descriptors

Sector(s) of use	SU3: Industrial uses: Uses of substances as such or in preparations at industrial sites
Product categories [PC]:	

Name of contributing environmental scenario and corresponding ERC

Use at industrial site leading to inclusion into/onto article:
 ERC5: Use at industrial site leading to inclusion into/onto article

List of names of contributing worker scenarios and corresponding PROCs

Use at industrial site leading to inclusion into/onto article:
 PROC1: Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions

Use at industrial site leading to inclusion into/onto article:
 PROC2: Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions

Use at industrial site leading to inclusion into/onto article:
 PROC3: Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition

Use at industrial site leading to inclusion into/onto article:
 PROC4: Chemical production where opportunity for exposure arises

Use at industrial site leading to inclusion into/onto article:
 PROC5: Mixing or blending in batch processes

Use at industrial site leading to inclusion into/onto article:
 PROC8a: Transfer of substance or mixture (charging and discharging) at non-dedicated facilities

Use at industrial site leading to inclusion into/onto article:
 PROC8b: Transfer of substance or mixture (charging and discharging) at dedicated facilities

Use at industrial site leading to inclusion into/onto article:

Product name: VARISOFT EQ 100

	PROC9: Transfer of substance or mixture into small containers (dedicated filling line, including weighing) <u>Use at industrial site leading to inclusion into/onto article:</u> : Treatment of articles by dipping and pouring <u>Use at industrial site leading to inclusion into/onto article:</u> : Use as laboratory reagent
--	---

2.1. Contributing exposure scenario controlling environmental exposure for: Use at industrial site leading to inclusion into/onto article, Textile dyes and impregnating products

--

Product characteristics

Physical state	
----------------	--

Viscosity:

Kinematic viscosity:	This information is not available.
Dynamic viscosity:	This information is not available.

Amounts used

Daily amount per site	1500 kg
Annual amount per site	30 t(onnes)/year

Frequency and duration of use

Batch process:	not relevant
Continuous process:	not relevant

Environment factors not influenced by risk management

Flow rate of receiving surface water (m ³ /d):	18,000 m ³ /d
Local freshwater dilution factor	10
Local marine water dilution factor	not relevant

Other given operational conditions affecting environmental exposure

type	Emission days	Emission factors			Remarks
		Air	Soil	Water	
		0 %	1 %	0.05 %	

Other relevant operational conditions	not relevant
---------------------------------------	--------------

Product name: VARISOFT EQ 100

Risk management measures (RMM)
Technical conditions and measures at process level (source) to prevent release

See chapter 8 of the safety data sheet (Environmental exposure controls).

Technical onsite conditions and measures to reduce or limit discharges, air emissions and releases to soil

Air	not relevant
Soil	not relevant
Water	not relevant
Sediment:	not relevant
Remarks:	not relevant

Organisational measures to prevent/limit release from site:

none

Conditions and measures related to sewage treatment plant
Size of municipal sewage system/treatment plant (m³/d):

type:	Municipal Sewage Treatment Plant
Discharge rate:	2,000 m ³ /d
Treatment effectiveness:	91.7 %
Sludge treatment technique:	Controlled application to agricultural soil.
Measures to limit air emissions:	not relevant
Remarks:	not relevant

Conditions and measures related to external treatment of waste for disposal

This information is not available.

Conditions and measures related to external recovery of waste

This information is not available.

Additional good practice advice beyond the REACH CSA

This information is not available.

2.2. Contributing exposure scenario controlling worker exposure for: Use at industrial site leading to inclusion into/onto article, Textile dyes and impregnating products

Process Categories:	PROC1: Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions
----------------------------	---

Product characteristics

Concentration of the substance in a mixture:	Covers percentage substance in the product up to 100 %.
---	---

Product name: VARISOFT EQ 100

Physical form of the product:	liquids
Vapour pressure:	not relevant
Process temperature:	not relevant
Remarks	not relevant

Amounts used

--

Frequency and duration of use

This information is not available.

Human factors not influenced by risk management
Exposed skin areas:

Palm of one hand	240 cm ²
-------------------------	---------------------

Other given operational conditions affecting workers exposure

Area of use	Room size:	Temperature	Ventilation rate	Remarks
indoor		:	1	

Other relevant operational conditions: not relevant

Risk management measures (RMM)

This information is not available.

Additional good practice advice beyond the REACH CSA

This information is not available.

2.3. Contributing exposure scenario controlling worker exposure for: Use at industrial site leading to inclusion into/onto article, Textile dyes and impregnating products

Process Categories:	PROC2: Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions
----------------------------	---

Product characteristics

Concentration of the substance in a mixture:	Covers percentage substance in the product up to 100 %.
---	---

Physical form of the product:	liquids
Vapour pressure:	not relevant
Process temperature:	not relevant
Remarks	not relevant

Product name: VARISOFT EQ 100

Amounts used

--

Frequency and duration of use

This information is not available.

Human factors not influenced by risk management
Exposed skin areas:

Palm of both hands	480 cm ²
--------------------	---------------------

Other given operational conditions affecting workers exposure

Area of use	Room size:	Temperature :	Ventilation rate	Remarks
indoor			1	

Other relevant operational conditions:	not relevant
---	--------------

Risk management measures (RMM)

This information is not available.

Additional good practice advice beyond the REACH CSA

This information is not available.

2.4. Contributing exposure scenario controlling worker exposure for: Use at industrial site leading to inclusion into/onto article, Textile dyes and impregnating products

Process Categories:	PROC3: Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition
----------------------------	---

Product characteristics

Concentration of the substance in a mixture:	Covers percentage substance in the product up to 100 %.
---	---

Physical form of the product:	liquids
Vapour pressure:	not relevant
Process temperature:	not relevant
Remarks	not relevant

Amounts used

--

Frequency and duration of use

This information is not available.

Product name: VARISOFT EQ 100

Human factors not influenced by risk management
Exposed skin areas:

Palm of one hand	240 cm ²
------------------	---------------------

Other given operational conditions affecting workers exposure

Area of use	Room size:	Temperature :	Ventilation rate	Remarks
indoor			1	

Other relevant operational conditions: not relevant

Risk management measures (RMM)

This information is not available.

Additional good practice advice beyond the REACH CSA

This information is not available.

2.5. Contributing exposure scenario controlling worker exposure for: Use at industrial site leading to inclusion into/onto article, Textile dyes and impregnating products

Process Categories: PROC4: Chemical production where opportunity for exposure arises

Product characteristics

Concentration of the substance in a mixture: Covers percentage substance in the product up to 100 %.

Physical form of the product:	liquids
Vapour pressure:	not relevant
Process temperature:	not relevant
Remarks	not relevant

Amounts used
Frequency and duration of use

This information is not available.

Product name: VARISOFT EQ 100

Human factors not influenced by risk management
Exposed skin areas:

Palm of both hands	480 cm ²
--------------------	---------------------

Other given operational conditions affecting workers exposure

Area of use	Room size:	Temperature :	Ventilation rate	Remarks
indoor			1	

Other relevant operational conditions: not relevant

Risk management measures (RMM)

This information is not available.

Additional good practice advice beyond the REACH CSA

This information is not available.

2.6. Contributing exposure scenario controlling worker exposure for: Use at industrial site leading to inclusion into/onto article, Textile dyes and impregnating products

Process Categories: PROC5: Mixing or blending in batch processes

Product characteristics

Concentration of the substance in a mixture:	Covers percentage substance in the product up to 100 %.
--	---

Physical form of the product:	liquids
Vapour pressure:	not relevant
Process temperature:	not relevant
Remarks	not relevant

Amounts used
Frequency and duration of use

This information is not available.

Product name: VARISOFT EQ 100

Human factors not influenced by risk management
Exposed skin areas:

Palm of both hands	480 cm ²
--------------------	---------------------

Other given operational conditions affecting workers exposure

Area of use	Room size:	Temperature :	Ventilation rate	Remarks
indoor			1	

Other relevant operational conditions:	not relevant
---	--------------

Risk management measures (RMM)

This information is not available.

Additional good practice advice beyond the REACH CSA

This information is not available.

2.7. Contributing exposure scenario controlling worker exposure for: Use at industrial site leading to inclusion into/onto article, Textile dyes and impregnating products

Process Categories:	PROC8a: Transfer of substance or mixture (charging and discharging) at non-dedicated facilities
----------------------------	---

Product characteristics

Concentration of the substance in a mixture:	Covers percentage substance in the product up to 100 %.
---	---

Physical form of the product:	liquids
Vapour pressure:	not relevant
Process temperature:	not relevant
Remarks	not relevant

Amounts used

--

Frequency and duration of use

This information is not available.

Product name: VARISOFT EQ 100

Human factors not influenced by risk management
Exposed skin areas:

Both hands	960 cm ²
------------	---------------------

Other given operational conditions affecting workers exposure

Area of use	Room size:	Temperature :	Ventilation rate	Remarks
indoor			1	

Other relevant operational conditions:	not relevant
---	--------------

Risk management measures (RMM)

This information is not available.

Additional good practice advice beyond the REACH CSA

This information is not available.

2.8. Contributing exposure scenario controlling worker exposure for: Use at industrial site leading to inclusion into/onto article, Textile dyes and impregnating products

Process Categories:	PROC8b: Transfer of substance or mixture (charging and discharging) at dedicated facilities
----------------------------	---

Product characteristics

Concentration of the substance in a mixture:	Covers percentage substance in the product up to 100 %.
---	---

Physical form of the product:	liquids
Vapour pressure:	not relevant
Process temperature:	not relevant
Remarks	not relevant

Amounts used

--

Frequency and duration of use

This information is not available.

Product name: VARISOFT EQ 100

Human factors not influenced by risk management
Exposed skin areas:

Both hands	960 cm ²
------------	---------------------

Other given operational conditions affecting workers exposure

Area of use	Room size:	Temperature :	Ventilation rate	Remarks
indoor			1	

Other relevant operational conditions:	not relevant
---	--------------

Risk management measures (RMM)

This information is not available.

Additional good practice advice beyond the REACH CSA

This information is not available.

2.9. Contributing exposure scenario controlling worker exposure for: Use at industrial site leading to inclusion into/onto article, Textile dyes and impregnating products

Process Categories:	PROC9: Transfer of substance or mixture into small containers (dedicated filling line, including weighing)
----------------------------	--

Product characteristics

Concentration of the substance in a mixture:	Covers percentage substance in the product up to 100 %.
---	---

Physical form of the product:	liquids
Vapour pressure:	not relevant
Process temperature:	not relevant
Remarks	not relevant

Amounts used

--

Frequency and duration of use

This information is not available.

Product name: VARISOFT EQ 100

Human factors not influenced by risk management
Exposed skin areas:

Palm of both hands	480 cm ²
--------------------	---------------------

Other given operational conditions affecting workers exposure

Area of use	Room size:	Temperature :	Ventilation rate	Remarks
indoor			1	

Other relevant operational conditions: not relevant

Risk management measures (RMM)

This information is not available.

Additional good practice advice beyond the REACH CSA

This information is not available.

2.10. Contributing exposure scenario controlling worker exposure for: Use at industrial site leading to inclusion into/onto article, Textile dyes and impregnating products

Process Categories: : Treatment of articles by dipping and pouring

Product characteristics

Concentration of the substance in a mixture:	Covers percentage substance in the product up to 100 %.
--	---

Physical form of the product:	liquids
Vapour pressure:	not relevant
Process temperature:	not relevant
Remarks	not relevant

Amounts used
Frequency and duration of use

This information is not available.

Product name: VARISOFT EQ 100

Human factors not influenced by risk management
Exposed skin areas:

Palm of both hands	480 cm ²
--------------------	---------------------

Other given operational conditions affecting workers exposure

Area of use	Room size:	Temperature :	Ventilation rate	Remarks
indoor			1	

Other relevant operational conditions:	not relevant
---	--------------

Risk management measures (RMM)

This information is not available.

Additional good practice advice beyond the REACH CSA

This information is not available.

2.11. Contributing exposure scenario controlling worker exposure for: Use at industrial site leading to inclusion into/onto article, Textile dyes and impregnating products

Process Categories:	: Use as laboratory reagent
----------------------------	-----------------------------

Product characteristics

Concentration of the substance in a mixture:	Covers percentage substance in the product up to 100 %.
---	---

Physical form of the product:	liquids
Vapour pressure:	not relevant
Process temperature:	not relevant
Remarks	not relevant

Amounts used

--

Frequency and duration of use

This information is not available.

Product name: VARISOFT EQ 100

Human factors not influenced by risk management
Exposed skin areas:

Palm of one hand	240 cm ²
------------------	---------------------

Other given operational conditions affecting workers exposure

Area of use	Room size:	Temperature :	Ventilation rate	Remarks
indoor			1	

Other relevant operational conditions: not relevant

Risk management measures (RMM)

This information is not available.

Additional good practice advice beyond the REACH CSA

This information is not available.

3. Exposure estimation
Environment:

Use at industrial site leading to inclusion into/onto article, Textile dyes and impregnating products:

ERC5:

Compartment	Predicted environmental concentration (PEC)	Risk characterization ratio (RCR)	Method	Remarks
Fresh water	0.003 mg/l	0.057	EUSES v2.1	none
freshwater sediment	3.074 mg/kg dry weight	0.555		none
marine water	0.0003 mg/l	0.057		none
Marine sediments	0.307 mg/kg dry weight	0.555		none
Sewage treatment plant	0.031 mg/l	0.031		none
soil	1.072 mg/kg dry weight	0.992		none

Product name: VARISOFT EQ 100
Health:
Use at industrial site leading to inclusion into/onto article, Textile dyes and impregnating products:
PROC1:

Route of Exposure	Specific condition	Exposure level	Risk characterisation ratio (RCR)	Method	Remarks
Worker - inhalative, long-term - systemic		0.332 mg/m ³	< 0.01	ECETOC TRA	none
Worker - dermal, long-term - systemic		0.034 mg/kg bw/day	< 0.01		none

Use at industrial site leading to inclusion into/onto article, Textile dyes and impregnating products:
PROC2:

Route of Exposure	Specific condition	Exposure level	Risk characterisation ratio (RCR)	Method	Remarks
Worker - inhalative, long-term - systemic		3.317 mg/m ³	0.091	ECETOC TRA	none
Worker - dermal, long-term - systemic		1.37 mg/kg bw/day	0.026		none
Worker - combined, long-term - systemic			0.118		none

Use at industrial site leading to inclusion into/onto article, Textile dyes and impregnating products:
PROC3:

Route of Exposure	Specific condition	Exposure level	Risk characterisation ratio (RCR)	Method	Remarks
Worker - inhalative, long-term - systemic		3.317 mg/m ³	0.091	ECETOC TRA	none
Worker - dermal, long-term - systemic		0.69 mg/kg bw/day	0.013		none
Worker - combined, long-term - systemic			0.105		none

Product name: VARISOFT EQ 100
Use at industrial site leading to inclusion into/onto article, Textile dyes and impregnating products:
PROC4:

Route of Exposure	Specific condition	Exposure level	Risk characterisation ratio (RCR)	Method	Remarks
Worker - inhalative, long-term - systemic		30317 mg/m ³	0.091	ECETOC TRA	none
Worker - dermal, long-term - systemic		6086 mg/kg bw/day	0.132		none
Worker - combined, long-term - systemic			0.223		none

Use at industrial site leading to inclusion into/onto article, Textile dyes and impregnating products:
PROC5:

Route of Exposure	Specific condition	Exposure level	Risk characterisation ratio (RCR)	Method	Remarks
Worker - inhalative, long-term - systemic		3.317 mg/m ³	0.091	ECETOC TRA	none
Worker - dermal, long-term - systemic		13.71 mg/kg bw/day	0.263		none
Worker - combined, long-term - systemic			0.355		none

Use at industrial site leading to inclusion into/onto article, Textile dyes and impregnating products:
PROC8a:

Route of Exposure	Specific condition	Exposure level	Risk characterisation ratio (RCR)	Method	Remarks
Worker - inhalative, long-term - systemic		3.317 mg/m ³	0.091	ECETOC TRA	none
Worker - dermal, long-term - systemic		13.71 mg/kg bw/day	0.263		none
Worker - combined, long-term - systemic			0.355		none

Product name: VARISOFT EQ 100
Use at industrial site leading to inclusion into/onto article, Textile dyes and impregnating products:
PROC8b:

Route of Exposure	Specific condition	Exposure level	Risk characterisation ratio (RCR)	Method	Remarks
Worker - inhalative, long-term - systemic		3.317 mg/m ³	0.091	ECETOC TRA	none
Worker - dermal, long-term - systemic		13.71 mg/kg bw/day	0.263		none
Worker - combined, long-term - systemic			0.355		none

Use at industrial site leading to inclusion into/onto article, Textile dyes and impregnating products:
PROC9:

Route of Exposure	Specific condition	Exposure level	Risk characterisation ratio (RCR)	Method	Remarks
Worker - inhalative, long-term - systemic		3.317 mg/m ³	0.091	ECETOC TRA	none
Worker - dermal, long-term - systemic		6.86 mg/kg bw/day	0.132		none
Worker - combined, long-term - systemic			0.233		none

Use at industrial site leading to inclusion into/onto article, Textile dyes and impregnating products:

:

Route of Exposure	Specific condition	Exposure level	Risk characterisation ratio (RCR)	Method	Remarks
Worker - inhalative, long-term - systemic		3.317 mg/m ³	0.091	ECETOC TRA	none
Worker - dermal, long-term - systemic		13.71 mg/kg bw/day	0.263		none
Worker - combined, long-term - systemic			0.355		none

Product name: VARISOFT EQ 100

Use at industrial site leading to inclusion into/onto article, Textile dyes and impregnating products:

:

Route of Exposure	Specific condition	Exposure level	Risk characterisation ratio (RCR)	Method	Remarks
Worker - inhalative, long-term - systemic		3.317 mg/m ³	0.091	ECETOC TRA	none
Worker - dermal, long-term - systemic		0.34 mg/kg bw/day	< 0.01		none
Worker - combined, long-term - systemic			0.098		none

4. Guidance to Downstream User to evaluate whether he works inside the boundaries set by the ES

Where other risk management measures/operational conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

Exposure Scenario

III.

Exposure scenario worker

1. Polishes and wax blends, Professional uses

List of use descriptors

Sector(s) of use	SU22: Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
Product categories [PC]:	

Name of contributing environmental scenario and corresponding ERC

Polishes and wax blends:
 ERC5: Use at industrial site leading to inclusion into/onto article

 ERC8c: Widespread use leading to inclusion into/onto article (indoor)

List of names of contributing worker scenarios and corresponding PROCs

Polishes and wax blends:
 PROC8a: Transfer of substance or mixture (charging and discharging) at non-dedicated facilities

Polishes and wax blends:
 PROC9: Transfer of substance or mixture into small containers (dedicated filling line, including weighing)

Polishes and wax blends:
 : Treatment of articles by dipping and pouring

Product name: VARISOFT EQ 100

--	--

2.1. Contributing exposure scenario controlling environmental exposure for: Polishes and wax blends, Professional uses

--

Product characteristics

Physical state	
-----------------------	--

Viscosity:

Kinematic viscosity:	This information is not available.
Dynamic viscosity:	This information is not available.

Amounts used

Daily amount per site	0.2255 kg/day
Fraction of regional tonnage used locally:	10 %

Frequency and duration of use

Batch process:	not relevant
Continuous process:	not relevant

Environment factors not influenced by risk management

Flow rate of receiving surface water (m³/d):	18,000 m3/d
Local freshwater dilution factor	10
Local marine water dilution factor	not relevant

Other given operational conditions affecting environmental exposure

type	Emission days	Emission factors			Remarks
		Air	Soil	Water	
		5 %	0.5 %	1 %	

Other relevant operational conditions	not relevant
--	--------------

Risk management measures (RMM)
Technical conditions and measures at process level (source) to prevent release

See chapter 8 of the safety data sheet (Environmental exposure controls).

Technical onsite conditions and measures to reduce or limit discharges, air emissions and releases to soil

Air	not relevant
Soil	not relevant

Product name: VARISOFT EQ 100

Water	not relevant
Sediment:	not relevant
Remarks:	not relevant

Organisational measures to prevent/limit release from site:

none

Conditions and measures related to sewage treatment plant
Size of municipal sewage system/treatment plant (m³/d):

type:	Municipal Sewage Treatment Plant
Discharge rate:	2,000 m ³ /d
Treatment effectiveness:	91.7 %
Sludge treatment technique:	Controlled application to agricultural soil.
Measures to limit air emissions:	not relevant
Remarks:	not relevant

Conditions and measures related to external treatment of waste for disposal

This information is not available.

Conditions and measures related to external recovery of waste

This information is not available.

Additional good practice advice beyond the REACH CSA

This information is not available.

2.2. Contributing exposure scenario controlling worker exposure for: Polishes and wax blends, Professional uses

Process Categories:	PROC8a: Transfer of substance or mixture (charging and discharging) at non-dedicated facilities
----------------------------	---

Product characteristics

Concentration of the substance in a mixture:	Covers percentage substance in the product up to 100 %.
Physical form of the product:	liquids
Vapour pressure:	not relevant
Process temperature:	not relevant
Remarks	not relevant

Amounts used

--

Product name: VARISOFT EQ 100

Frequency and duration of use

This information is not available.

Human factors not influenced by risk management

Exposed skin areas:

Both hands	960 cm ²
-------------------	---------------------

Other given operational conditions affecting workers exposure

Area of use	Room size:	Temperature :	Ventilation rate	Remarks
indoor			1	

Other relevant operational conditions:	not relevant
---	--------------

Risk management measures (RMM)

This information is not available.

Additional good practice advice beyond the REACH CSA

This information is not available.

2.3. Contributing exposure scenario controlling worker exposure for: Polishes and wax blends, Professional uses

Process Categories:	PROC9: Transfer of substance or mixture into small containers (dedicated filling line, including weighing)
----------------------------	--

Product characteristics

Concentration of the substance in a mixture:	Covers percentage substance in the product up to 100 %.
---	---

Physical form of the product:	liquids
Vapour pressure:	not relevant
Process temperature:	not relevant
Remarks	not relevant

Amounts used

Frequency and duration of use

This information is not available.

Product name: VARISOFT EQ 100

Human factors not influenced by risk management
Exposed skin areas:

Palm of both hands	480 cm ²
--------------------	---------------------

Other given operational conditions affecting workers exposure

Area of use	Room size:	Temperature :	Ventilation rate	Remarks
indoor			1	

Other relevant operational conditions: not relevant

Risk management measures (RMM)

This information is not available.

Additional good practice advice beyond the REACH CSA

This information is not available.

2.4. Contributing exposure scenario controlling worker exposure for: Polishes and wax blends, Professional uses

Process Categories: : Treatment of articles by dipping and pouring

Product characteristics

Concentration of the substance in a mixture:	Covers percentage substance in the product up to 100 %.
--	---

Physical form of the product:	liquids
Vapour pressure:	not relevant
Process temperature:	not relevant
Remarks	not relevant

Amounts used
Frequency and duration of use

This information is not available.

Product name: VARISOFT EQ 100

Human factors not influenced by risk management
Exposed skin areas:

Palm of both hands	480 cm ²
--------------------	---------------------

Other given operational conditions affecting workers exposure

Area of use	Room size:	Temperature :	Ventilation rate	Remarks
indoor			1	

Other relevant operational conditions: not relevant

Risk management measures (RMM)

This information is not available.

Additional good practice advice beyond the REACH CSA

This information is not available.

3. Exposure estimation
Environment:
Polishes and wax blends, Professional uses:
ERC8f:

Compartment	Predicted environmental concentration (PEC)	Risk characterisation ratio (RCR)	Method	Remarks
Fresh water	0.01084 mg/m ³	< 0.01	EUSES v2.1	none
freshwater sediment	0.0113 mg/kg dry weight	< 0.01		none
marine water	0.00108 mg/m ³	< 0.01		none
Marine sediments	0.001 mg/kg dry weight	< 0.01		none
Sewage treatment plant	0.093 mg/m ³	< 0.01		none
soil	0.003 mg/kg dry weight	< 0.01		none

Product name: VARISOFT EQ 100
Health:
Polishes and wax blends, Professional uses:
PROC8a:

Route of Exposure	Specific condition	Exposure level	Risk characterisation ratio (RCR)	Method	Remarks
Worker - inhalative, long-term - systemic		3.317 mg/m ³	0.091	ECETOC TRA	none
Worker - dermal, long-term - systemic		13.71 mg/kg bw/day	0.263		none
Worker - combined, long-term - systemic			0.355		none

Polishes and wax blends, Professional uses:
PROC9:

Route of Exposure	Specific condition	Exposure level	Risk characterisation ratio (RCR)	Method	Remarks
Worker - inhalative, long-term - systemic		3.317 mg/m ³	0.091	ECETOC TRA	none
Worker - dermal, long-term - systemic		6.86 mg/kg bw/day	0.132		none
Worker - combined, long-term - systemic			0.233		none

Polishes and wax blends, Professional uses:

:

Route of Exposure	Specific condition	Exposure level	Risk characterisation ratio (RCR)	Method	Remarks
Worker - inhalative, long-term - systemic		3.317 mg/m ³	0.091	ECETOC TRA	none
Worker - dermal, long-term - systemic		13.71 mg/kg bw/day	0.263		none
Worker - combined, long-term - systemic			0.355		none

Product name: VARISOFT EQ 100

4. Guidance to Downstream User to evaluate whether he works inside the boundaries set by the ES

Where other risk management measures/operational conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

Exposure Scenario

IV.

Exposure scenario consumer

1. Polishes and wax blends, Consumer uses:

List of use descriptors

Sector(s) of use	SU21: Consumer uses: Private households (= general public = consumers)
Product categories [PC]:	PC31_1: Subcategory: Polishes, wax/cream (floor, furniture, shoes) PC31_2: Subcategory: Polishes, spray (furniture, shoes)

Name of contributing environmental scenario and corresponding ERC	<u>Polishes and wax blends:</u> ERC8f: Widespread use leading to inclusion into/onto article (outdoor) ERC8c: Widespread use leading to inclusion into/onto article (indoor)
--	--

List of names of contributing worker scenarios and corresponding PROCs	<u>Polishes and wax blends:</u> : <u>Polishes and wax blends:</u> :
---	--

2.1. Contributing exposure scenario controlling environmental exposure for: Polishes and wax blends, Consumer uses

Product characteristics

Physical state	
Viscosity	
Kinematic viscosity	This information is not available.
Dynamic viscosity	This information is not available.

Product name: VARISOFT EQ 100

Amounts used

Daily amount per site	0.0055 kg/day
Fraction of regional tonnage used locally:	10 %

Frequency and duration of use

Batch process	not relevant
Continuous process	not relevant

Environment factors not influenced by risk management

Flow rate of receiving surface water (m ³ /d):	18,000 m ³ /d
Local freshwater dilution factor	10
Local marine water dilution factor	not relevant

Other given operational conditions affecting environmental exposure

type	Emission days	Emission factors			Remarks
		Air	Soil	Water	
		15 %	0.5 %	1 %	

Other relevant operational conditions	not relevant
---------------------------------------	--------------

Risk management measures (RMM)
Conditions and measures related to municipal sewage treatment plant

Size of municipal sewage system/treatment plant (m³/d):	
type:	Municipal Sewage Treatment Plant
Discharge rate:	2,000 m ³ /d
Treatment effectiveness:	Municipal Sewage Treatment Plant
Sludge treatment technique:	Controlled application to agricultural soil.
Measures to limit air emissions:	not relevant
Remarks	not relevant

Conditions and measures related to external treatment of waste for disposal

none

Conditions and measures related to external recovery of waste

none

Additional good practice advice beyond the REACH CSA

This information is not available.

Product name: VARISOFT EQ 100

2.2. Contributing exposure scenario controlling consumer exposure for: Polishes and wax blends, Consumer uses

Product Categories:	PC31_1: Subcategory: Polishes, wax/cream (floor, furniture, shoes)
----------------------------	--

Product characteristics

Concentration of the substance in a mixture:	Covers percentage substance in the product up to 5 %. 3%
---	--

Physical form of the product:	not relevant
Vapour pressure:	not relevant
Process temperature:	not relevant
Remarks	not relevant
Application:	not relevant

Amounts used

Amount per use	10 g
-----------------------	------

Frequency and duration of use

	Use duration (h/d):	Frequency of use:	Remarks
Application duration	4 h		

Human factors not influenced by risk management
Exposed skin areas:

Both hands	
-------------------	--

Other given operational conditions affecting consumers exposure

Other relevant operational conditions	not relevant
--	--------------

Risk management measures (RMM)

This information is not available.

Additional good practice advice beyond the REACH CSA

not relevant

2.3. Contributing exposure scenario controlling consumer exposure for: Polishes and wax blends, Consumer uses

Product Categories:	PC31_1: Subcategory: Polishes, wax/cream (floor, furniture, shoes)
----------------------------	--

Product name: VARISOFT EQ 100

Product characteristics

Concentration of the substance in a mixture:	Covers percentage substance in the product up to 1 %. 1%
Physical form of the product:	not relevant
Vapour pressure:	not relevant
Process temperature:	not relevant
Remarks	not relevant
Application:	not relevant

Amounts used

Amount per use	3 g
-----------------------	-----

Frequency and duration of use

	Use duration (h/d):	Frequency of use:	Remarks
Application duration	4 h	1 uses per day	

Human factors not influenced by risk management

Exposed skin areas:

Both hands	
-------------------	--

Other given operational conditions affecting consumers exposure

Other relevant operational conditions	not relevant
--	--------------

Risk management measures (RMM)

This information is not available.

Additional good practice advice beyond the REACH CSA

not relevant

Product name: VARISOFT EQ 100

3. Exposure estimation and reference to its source

Environment:
Polishes and wax blends, Consumer uses:
ERC8f:

Compartment	Predicted environmental concentration (PEC)	Risk characterisation ratio (RCR)	Method	Remarks
Fresh water	0.00186 mg/m ³	< 0.01	EUSES v2.1	none
freshwater sediment	0.002 mg/kg dry weight	< 0.01		none
marine water	0.00019 mg/m ³	< 0.01		none
Marine sediments	0.0002 mg/kg dry weight	< 0.01		none
Sewage treatment plant	0.00228 mg/m ³	< 0.01		none
soil	0.000185 mg/kg dry weight	< 0.01		none

Health:
Polishes and wax blends, Consumer uses:
PC31_1:

Route of Exposure	Specific condition	Exposure level	Risk characterisation ratio (RCR)	Method	Remarks
Consumer - inhalative, long-term - systemic		0.441 mg/m ³	0.041	ECETOC TRA, Consumer	none
Consumer - dermal, long-term - systemic		1.429 mg/kg bw/day	0.046		none
Consumer - oral, long-term - systemic		0 mg/kg bw/day	< 0.01		none
Consumer - combined, long-term - systemic			0.086		none

Product name: VARISOFT EQ 100
Polishes and wax blends, Consumer uses:
PC31_2:

Route of Exposure	Specific condition	Exposure level	Risk characterisation ratio (RCR)	Method	Remarks
Consumer - inhalative, long-term - systemic		0.004 mg/m ³	< 0.01	ECETOC TRA, Consumer	none
Consumer - dermal, long-term - systemic		4.288 mg/kg bw/day	0.137		none
Consumer - oral, long-term - systemic		0 mg/kg bw/day	< 0.01		none
Consumer - combined, long-term - systemic			0.138		none

4. Guidance to Downstream User to evaluate whether he works inside the boundaries set by the ES

This information is not available.

Exposure Scenario
V.
Exposure scenario consumer
1. Cosmetics, personal care products:

List of use descriptors	
Sector(s) of use	SU21: Consumer uses: Private households (= general public = consumers)
Product categories [PC]:	PC39: Cosmetics, personal care products
Name of contributing environmental scenario and corresponding ERC	<u>Cosmetics, personal care products:</u> ERC8a: Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor)
List of names of contributing worker scenarios and corresponding PROCs	<u>Cosmetics, personal care products:</u> :

Product name: VARISOFT EQ 100

2.1. Contributing exposure scenario controlling environmental exposure for: Cosmetics, personal care products
Product characteristics

Concentration of the substance in a mixture:	Covers percentage substance in the product up to 100 %.
--	---

Physical state	
----------------	--

Viscosity	
Kinematic viscosity	This information is not available.
Dynamic viscosity	This information is not available.

Amounts used

Daily amount for wide disperse uses	5.5 grams / day
-------------------------------------	-----------------

Frequency and duration of use

Batch process	not relevant
Continuous process	not relevant

Environment factors not influenced by risk management

Flow rate of receiving surface water (m ³ /d):	18,000 m ³ /d
Local freshwater dilution factor	10
Local marine water dilution factor	100

Other given operational conditions affecting environmental exposure

type	Emission days	Emission factors			Remarks
		Air	Soil	Water	
Continuous release		0 %	0 %	100 %	

Other relevant operational conditions	not relevant
---------------------------------------	--------------

Risk management measures (RMM)
Conditions and measures related to municipal sewage treatment plant

Size of municipal sewage system/treatment plant (m³/d):	
type:	Municipal Sewage Treatment Plant
Discharge rate:	2,000 m ³ /d
Treatment effectiveness:	Municipal Sewage Treatment Plant
Sludge treatment technique:	Controlled application of sewage sludge to agricultural soil
Measures to limit air emissions:	not relevant
Remarks	not relevant

Product name: VARISOFT EQ 100

Conditions and measures related to external treatment of waste for disposal

none

Conditions and measures related to external recovery of waste

none

Additional good practice advice beyond the REACH CSA

This information is not available.

2.2. Contributing exposure scenario controlling consumer exposure for: Cosmetics, personal care products

Product Categories:	PC39: Cosmetics, personal care products
----------------------------	---

Product characteristics

Concentration of the substance in a mixture:	In accordance to the Article 14 (5b) of the REACH Regulation (EC) No 1907/2006, exposure estimation and risk characterisation for human health does not need to be performed for end uses in cosmetic products within the scope of Directive 76/768/EEC.
---	--

Physical form of the product:	not relevant
--------------------------------------	--------------

Vapour pressure:	not relevant
-------------------------	--------------

Process temperature:	not relevant
-----------------------------	--------------

Remarks	not relevant
----------------	--------------

Application:	not relevant
---------------------	--------------

Amounts used

This information is not available.

Frequency and duration of use

Human factors not influenced by risk management

This information is not available.

Other given operational conditions affecting consumers exposure

Other relevant operational conditions	not relevant
--	--------------

Risk management measures (RMM)

This information is not available.

Additional good practice advice beyond the REACH CSA

not relevant

Product name: VARISOFT EQ 100

3. Exposure estimation and reference to its source

Environment:
Cosmetics, personal care products:
ERC8a:

Compartment	Predicted environmental concentration (PEC)	Risk characterisation ratio (RCR)	Method	Remarks
Fresh water	0.0372 µg/l	< 0.01		none
freshwater sediment	0.037 mg/kg dry weight	0.022		none
marine water	0.0036 µg/l	< 0.01		none
Marine sediments	0.004 mg/kg dry weight	0.021		none
Sewage treatment plant	0.227 µg/l	< 0.01		none
soil	0.008 mg/kg dry weight	0.024		none

Health:
Cosmetics, personal care products:

none

4. Guidance to Downstream User to evaluate whether he works inside the boundaries set by the ES

In accordance to the Article 14 (5b) of the REACH Regulation (EC) No 1907/2006, exposure estimation and risk characterisation for human health does not need to be performed for end uses in cosmetic products within the scope of Directive 76/768/EEC.