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Safety data sheet

BASF safety data sheet. This is a translation of the country-specific safety data sheet into a language other than that required by law. This document does not replace the safety data sheet provided according to Regulation (EC) No 1907/2006.
Date / Revised: 29.08.2022 Version: 1.0
Date previous version: not applicable Previous version: none
Date / First version: 29.08.2022
Product: **beta-Ionone R**

(ID no. 30035178/SDS_GEN_FR/EN)
Date of print 10.10.2025

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

1.1. Product identifier

beta-Ionone R

Chemical name: (E)-4-(2,6,6-Trimethyl-1-cyclohexen-1-yl)-3-buten-2-one
CAS Number: 79-77-6

REACH registration number: 01-2119449921-34-0000

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

Relevant identified uses: Chemical, Chemical for detergents, Cosmetic and oral care chemical, flavoring substance

For the detailed identified uses of the product see appendix of the safety data sheet.

1.3. Details of the supplier of the safety data sheet

Company:
BASF SE
67056 Ludwigshafen
GERMANY

Contact address:
BASF France SAS
176, rue Montmartre
75002 PARIS
FRANCE

Telephone: +33 1 4964-5732
E-mail address: securite-produits.france@basf.com

1.4. Emergency telephone number

Tél.: 01 45 42 59 59 (APPEL D'URGENCE ORFILA)
Fax: 01 49 64 53 80 (heures de bureau)
International emergency number (Numéro d'urgence international):
contact speaking the language of the calling country (contact parlant la langue du pays d’appel)
Telephone: +49 180 2273-112

SECTION 2: Hazards Identification

2.1. Classification of the substance or mixture

According to Regulation (EC) No 1272/2008 [CLP]

Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.

For the classifications not written out in full in this section the full text can be found in section 16.

2.2. Label elements

According to Regulation (EC) No 1272/2008 [CLP]

Pictogram:

Hazard Statement:

H411 Toxic to aquatic life with long lasting effects.

Precautionary Statements (Prevention):

P273 Avoid release to the environment.

Precautionary Statements (Response):

P391 Collect spillage.

Precautionary Statements (Disposal):

P501 Dispose of contents and container to hazardous or special waste collection point.

2.3. Other hazards

According to Regulation (EC) No 1272/2008 [CLP]

The product does not contain a substance fulfilling the PBT (persistent/bioaccumulative/toxic) criteria or the vPvB (very persistent/very bioaccumulative) criteria. Product does not contain a substance above legal limits included in the list established in accordance with Article 59(1) of Regulation (EC) No 1907/2006 for having endocrine disrupting properties or is identified to have endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

SECTION 3: Composition/Information on Ingredients

3.1. Substances

Chemical nature

(E)-4-(2,6,6-Trimethyl-1-cyclohexen-1-yl)-3-

buten-2-one	Aquatic Chronic 2 H411
CAS Number: 79-77-6 EC-Number: 201-224-3	

For the classifications not written out in full in this section, including the hazard classes and the hazard statements, the full text is listed in section 16.

3.2. Mixtures

Not applicable

SECTION 4: First-Aid Measures

4.1. Description of first aid measures

Remove contaminated clothing.

If inhaled:
Keep patient calm, remove to fresh air.

On skin contact:
Wash thoroughly with soap and water

On contact with eyes:
Wash affected eyes for at least 15 minutes under running water with eyelids held open.

On ingestion:
Rinse mouth and then drink 200-300 ml of water.

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

Symptoms: Information, i.e. additional information on symptoms and effects may be included in the GHS labeling phrases available in Section 2 and in the Toxicological assessments available in Section 11.

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

Treatment: Symptomatic treatment (decontamination, vital functions).

SECTION 5: Fire-Fighting Measures

5.1. Extinguishing media

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

Unsuitable extinguishing media for safety reasons:

water jet

5.2. Special hazards arising from the substance or mixture

Endangering substances: carbon oxides, harmful vapours
Advice: The substances/groups of substances mentioned can be released in case of fire.

5.3. Advice for fire-fighters

Special protective equipment:
Wear a self-contained breathing apparatus.

Further information:
Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.
Cool endangered containers with water-spray.

SECTION 6: Accidental Release Measures

6.1. Personal precautions, protective equipment and emergency procedures

Use personal protective clothing. Information regarding personal protective measures, see section 8.

6.2. Environmental precautions

Do not discharge into drains/surface waters/groundwater. Inform authorities in the event of product spillage to water courses or sewage systems.

6.3. Methods and material for containment and cleaning up

For small amounts: Contain with absorbent material (e.g. sand, silica gel, acid binder, general purpose binder, sawdust).
For large amounts: Dike spillage. Pump off product.
Dispose of absorbed material in accordance with regulations.

6.4. Reference to other sections

Information regarding exposure controls/personal protection and disposal considerations can be found in section 8 and 13.

SECTION 7: Handling and Storage

7.1. Precautions for safe handling

Handle in accordance with good industrial hygiene and safety practice.

Protection against fire and explosion:

Take precautionary measures against static discharges. Avoid all sources of ignition: heat, sparks, open flame.

7.2. Conditions for safe storage, including any incompatibilities

Odour-sensitive: Segregate from products releasing odours.
Further information on storage conditions: Keep container tightly closed in a cool, well-ventilated place.

7.3. Specific end use(s)

See exposure scenario(s) in the attachment to this safety data sheet.

SECTION 8: Exposure Controls/Personal Protection

8.1. Control parameters

Components with occupational exposure limits
No substance specific occupational exposure limits known.

PNEC
freshwater: 0,07 mg/l

marine water: 0,007 mg/l

intermittent release: 0,7 mg/l

STP: 9 mg/l

sediment (freshwater): 0,0616 mg/kg

sediment (marine water): 0,00616 mg/kg

soil: 0,0156 mg/kg

DNEL
consumer:
Long-term exposure- systemic effects, Inhalation: 3,1 mg/m3

worker:
Long-term exposure- systemic effects, Inhalation: 12,7 mg/m3

consumer:
Long-term exposure- systemic effects, dermal: 3,60 mg/kg

worker:

Long-term exposure- systemic effects, dermal: 6 mg/kg

consumer:
Long-term exposure- systemic effects, oral: 1,80 mg/kg

8.2. Exposure controls

Personal protective equipment

Respiratory protection:
Respiratory protection in case of vapour/aerosol release. Particle filter with medium efficiency for solid and liquid particles (e.g. EN 143 or 149, Type P2 or FFP2)

Consider the risk management measures as outlined in the exposure scenario.

Hand protection:
Chemical resistant protective gloves (EN ISO 374-1)
Manufacturer's directions for use should be observed because of great diversity of types.

Consider the risk management measures as outlined in the exposure scenario.

Eye protection:
Safety glasses with side-shields (frame goggles) (e.g. EN 166)

Consider the risk management measures as outlined in the exposure scenario.

Body protection:
Body protection must be chosen based on level of activity and exposure.

Consider the risk management measures as outlined in the exposure scenario.

General safety and hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Wearing of closed work clothing is recommended. No eating, drinking, smoking or tobacco use at the place of work. Hands and/or face should be washed before breaks and at the end of the shift. Store work clothing separately.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

State of matter:	liquid
Form:	liquid
Colour:	colourless to slightly yellow
Odour:	flowery
Odour threshold:	< 100 ppm

Melting point:	-35 °C (1.013 hPa) Literature data.	
Boiling point:	267,1 °C (1.013 hPa)	
Flammability:	hardly combustible	(derived from flash point)
Lower explosion limit:	For liquids not relevant for classification and labelling., The lower explosion point may be 5 - 15 °C below the flash point.	
Upper explosion limit:	For liquids not relevant for classification and labelling.	
Flash point:	126 °C	(ISO 2719, closed cup)
Auto-ignition temperature:	273 °C	(DIN EN 14522)
Thermal decomposition:	approx. 280 °C (DSC (DIN 51007)) self-accelerating reaction	
pH value:	not applicable	
Viscosity, kinematic:	11,8 mm2/s (20 °C)	(OECD 114)
	5,43 mm2/s (40 °C)	(OECD 114)
Viscosity, dynamic:	11,2 mPa.s (20 °C)	(OECD 114)
	5,04 mPa.s (40 °C)	(OECD 114)
Solubility in water:	0,11 g/l (20 °C)	(OECD Guideline 105)
Solubility (qualitative) solvent(s):	organic solvents readily soluble	
Partitioning coefficient n-octanol/water (log Kow):	4 (25 °C) Literature data.	(OECD Guideline 117)
Vapour pressure:	approx. 0,072 hPa (25 °C) Literature data.	(measured)
Relative density:	0,9447 (20 °C) Literature data.	
Density:	0,9447 g/cm3 (20 °C) Literature data.	
Relative vapour density (air):	> 1 (20 °C) Heavier than air.	(calculated)

9.2. Other information

Information with regard to physical hazard classes

Explosives

Explosion hazard:	Based on the chemical structure there is no indication of explosive properties.	(other)
Impact sensitivity:	Based on the chemical structure there is no shock-sensitivity.	

Oxidizing properties

Fire promoting properties: not fire-propagating

Pyrophoric properties

Self-ignition temperature:		Test type: Spontaneous self-ignition at room-temperature.
	Based on its structural properties the product is not classified as self-igniting.	

Self-heating substances and mixtures

Self heating ability:	It is not a substance capable of spontaneous heating.

Substances and mixtures, which emit flammable gases in contact with water

Formation of flammable gases:
Forms no flammable gases in the presence of water.

Corrosion to metals

No corrosive effect on metal.

Other safety characteristics

pKA:	The substance does not dissociate.	
Adsorption/water - soil:	KOC: 625,1; log KOC: 2,8	(calculated)
Surface tension:	Based on chemical structure, surface activity is not to be expected.	
Molar mass:	192,30 g/mol	
SAPT-Temperature:	Study scientifically not justified.	
Evaporation rate:	Value can be approximated from Henry's Law Constant or vapor pressure.	

SECTION 10: Stability and Reactivity

10.1. Reactivity

No hazardous reactions if stored and handled as prescribed/indicated.

Corrosion to metals:	No corrosive effect on metal.	
Formation of flammable gases:	Remarks:	Forms no flammable gases in the presence of water.

10.2. Chemical stability

The product is stable if stored and handled as prescribed/indicated.

10.3. Possibility of hazardous reactions

No hazardous reactions if stored and handled as prescribed/indicated.

10.4. Conditions to avoid

See SDS section 7 - Handling and storage.

10.5. Incompatible materials

Substances to avoid:
None known during use and storage if used according to instructions.

10.6. Hazardous decomposition products

Hazardous decomposition products:
No hazardous decomposition products if stored and handled as prescribed/indicated.

SECTION 11: Toxicological Information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Assessment of acute toxicity:
Virtually nontoxic after a single ingestion. Virtually nontoxic after a single skin contact.

Experimental/calculated data:
LD50 rat (oral): > 4.000 mg/kg

LD50 rat (dermal): > 2.000 mg/kg (OECD Guideline 402)

The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Irritation

Assessment of irritating effects:
Not irritating to the skin. Not irritating to the eyes.

Experimental/calculated data:
Skin corrosion/irritation
rabbit: non-irritant (OECD Guideline 404)

Serious eye damage/irritation
rabbit: non-irritant (OECD Guideline 405)

Respiratory/Skin sensitization

Assessment of sensitization:
The substance did not cause skin sensitization in humans.

Experimental/calculated data:
guinea pig: Non-sensitizing. (similar to OECD guideline 406)
The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

human: Non-sensitizing. (Human patch test)
The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Germ cell mutagenicity

Assessment of mutagenicity:
Most of the results from the available studies show no evidence of a mutagenic effect. The product has not been fully tested. The statements have been derived in parts from products of a similar structure or composition.

Carcinogenicity

Assessment of carcinogenicity:
The whole of the information assessable provides no indication of a carcinogenic effect.

Reproductive toxicity

Assessment of reproduction toxicity:
The results of animal studies gave no indication of a fertility impairing effect.

Developmental toxicity

Assessment of teratogenicity:
No indications of a developmental toxic / teratogenic effect were seen in animal studies.

Specific target organ toxicity (single exposure)

Assessment of STOT single:
Based on available data, the classification criteria are not met.

Repeated dose toxicity and Specific target organ toxicity (repeated exposure)

Assessment of repeated dose toxicity:
No substance-specific organtoxicity was observed after repeated administration to animals.

Aspiration hazard

not applicable

Interactive effects

No data available.

11.2. Information on other hazards

Endocrine disrupting properties

The substance is not identified to have endocrine disrupting properties according to Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 nor is included in the Candidate List of substances of very high concern according to EU REACh Article 59 for having endocrine disrupting properties.

SECTION 12: Ecological Information

12.1. Toxicity

Assessment of aquatic toxicity:

Acutely toxic for aquatic organisms. The inhibition of the degradation activity of activated sludge is not anticipated when introduced to biological treatment plants in appropriate low concentrations.

Toxicity to fish:
LC50 (96 h) 5,09 mg/l, Pimephales promelas (EPA 72-1, Flow through.)
The details of the toxic effect relate to the nominal concentration. The product has low solubility in the test medium. An aqueous solution prepared with solubilizers has been tested.

Aquatic invertebrates:
EC50 (48 h) 4,03 mg/l, Daphnia magna (OECD Guideline 202, part 1, static)
The details of the toxic effect relate to the nominal concentration.

Aquatic plants:
EC50 (72 h) 22,15 mg/l (growth rate), Scenedesmus subspicatus (DIN 38412 Part 9, static)
The details of the toxic effect relate to the nominal concentration. The product has low solubility in the test medium. An aqueous solution prepared with solubilizers has been tested.

Microorganisms/Effect on activated sludge:
EC50 (30 min) approx. 1.000 mg/l, activated sludge, domestic (DIN EN ISO 8192-OECD 209-88/302/EEC,P. C, aerobic)

Chronic toxicity to fish:
Study scientifically not justified.

Chronic toxicity to aquatic invertebrates:
Study scientifically not justified.

Assessment of terrestrial toxicity:
No data available concerning terrestrial toxicity.
Study scientifically not justified.

Soil living organisms:
No data available.

Terrestrial plants:
No data available.

Other terrestrial non-mammals:
LD50 > 562 mg/kg, Agelaius phoeniceus
Unspecified

12.2. Persistence and degradability

Assessment biodegradation and elimination (H2O):
Readily biodegradable (according to OECD criteria).

Elimination information:
70 - 80 % BOD of the ThOD (28 d) (OECD Guideline 301 F) (aerobic, activated sludge, domestic)

Assessment of stability in water:
Substance is readily biodegradable, therefore hydrolysis is not expected to be relevant.

12.3. Bioaccumulative potential

Assessment bioaccumulation potential:
Because of the n-octanol/water distribution coefficient (log Pow) accumulation in organisms is possible.

12.4. Mobility in soil

Assessment transport between environmental compartments:
Volatility: The substance will slowly evaporate into the atmosphere from the water surface.
Adsorption in soil: Adsorption to solid soil phase is not expected.

12.5. Results of PBT and vPvB assessment

According to Annex XIII of Regulation (EC) No.1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH): The product does not fulfill the criteria for PBT (Persistent/bioaccumulative/toxic) and vPvB (very persistent/very bioaccumulative). Self classification

12.6. Endocrine disrupting properties

The substance is not identified to have endocrine disrupting properties according to Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 nor is included in the Candidate List of substances of very high concern according to EU REACh Article 59 for having endocrine disrupting properties.

12.7. Other adverse effects

The substance is not listed in Regulation (EC) 1005/2009 on substances that deplete the ozone layer.

SECTION 13: Disposal Considerations

13.1. Waste treatment methods

Observe national and local legal requirements.

SECTION 14: Transport Information

Land transport

ADR

UN number or ID number:	UN3082
UN proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (BETA-IONONE)
Transport hazard class(es):	9, EHSM
Packing group:	III
Environmental hazards:	yes
Special precautions for user:	None known

RID

UN number or ID number:	UN3082
UN proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (BETA-IONONE)
Transport hazard class(es):	9, EHSM
Packing group:	III
Environmental hazards:	yes
Special precautions for user:	None known

Inland waterway transport

ADN

UN number or ID number:	UN3082
UN proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (BETA-IONONE)
Transport hazard class(es):	9, EHSM
Packing group:	III
Environmental hazards:	yes
Special precautions for user:	None known

Transport in inland waterway vessel
Not evaluated

Sea transport

IMDG

UN number or ID number:	UN 3082
UN proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (BETA-IONONE)
Transport hazard class(es):	9, EHSM
Packing group:	III
Environmental hazards:	yes Marine pollutant: YES
Special precautions for user:	EmS: F-A; S-F

Air transport

IATA/ICAO

UN number or ID number:	UN 3082
UN proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (BETA-IONONE)
Transport hazard class(es):	9, EHSM
Packing group:	III
Environmental hazards:	yes
Special precautions for user:	None known

14.1. UN number or ID number
See corresponding entries for “UN number or ID number” for the respective regulations in the tables above.

14.2. UN proper shipping name
See corresponding entries for “UN proper shipping name” for the respective regulations in the tables above.

14.3. Transport hazard class(es)
See corresponding entries for “Transport hazard class(es)” for the respective regulations in the tables above.

14.4. Packing group
See corresponding entries for “Packing group” for the respective regulations in the tables above.

14.5. Environmental hazards
See corresponding entries for “Environmental hazards” for the respective regulations in the tables above.

14.6. Special precautions for user

See corresponding entries for “Special precautions for user” for the respective regulations in the tables above.

14.7. Maritime transport in bulk according to IMO instruments

Maritime transport in bulk is not intended.

Further information

Product may be shipped as non-hazardous in suitable packages containing a net quantity of 5 L or less under the provisions of various regulatory agencies: ADR, RID, ADN: Special Provision 375; IMDG: 2.10.2.7; IATA: A197; TDG: Special Provision 99(2); 49CFR: §171.4 (c) (2) and also the Special Provision 375 in Appendix B which is regulated in China "Regulations Concerning Road Transportation of Dangerous Goods Part 3: Index of dangerous goods name and transportation requirements" (JT/T 617.3)

SECTION 15: Regulatory Information

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

Prohibitions, Restrictions and Authorizations

Annex XVII of Regulation (EC) No 1907/2006: Number on List: 3

Directive 2012/18/EU - Control of Major Accident Hazards involving dangerous substances (EU): List entry in regulation: E2

Storage class in France (Nomenclature ICPE): 4511

If other regulatory information applies that is not already provided elsewhere in this safety data sheet, then it is described in this subsection.

15.2. Chemical Safety Assessment

Chemical Safety Assessment performed

SECTION 16: Other Information

Assessment of the hazard classes according to UN GHS criteria (most recent version)

Aquatic Acute 2
Aquatic Chronic 2

Any other intended applications should be discussed with the manufacturer. Corresponding occupational protection measurements must be followed.

Full text of the classifications, including the hazard classes and the hazard statements, if mentioned in section 2 or 3:

Aquatic Chronic	Hazardous to the aquatic environment - chronic
H411	Toxic to aquatic life with long lasting effects.

Abbreviations

ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road. ADN = The European Agreement concerning the International Carriage of Dangerous Goods by Inland waterways. ATE = Acute Toxicity Estimates. CAO = Cargo Aircraft Only. CAS = Chemical Abstract Service. CLP = Classification, Labelling and Packaging of substances and mixtures. DIN = German national organization for standardization. DNEL = Derived No Effect Level. EC50 = Effective concentration median for 50% of the population. EC = European Community. EN = European Standards. IARC = International Agency for Research on Cancer. IATA = International Air Transport Association. IBC-Code = Intermediate Bulk Container code. IMDG = International Maritime Dangerous Goods Code. ISO = International Organization for Standardization. STEL = Short-Term Exposure Limit. LC50 = Lethal concentration median for 50% of the population. LD50 = Lethal dose median for 50% of the population. TLV = Threshold Limit Value. MARPOL = The International Convention for the Prevention of Pollution from Ships. NEN = Dutch Norm. NOEC = No Observed Effect Concentration. OEL = Occupational Exposure Limit. OECD = Organization for Economic Cooperation and Development. PBT = Persistent, Bioaccumulative and Toxic. PNEC = Predicted No Effect Level. PPM = Parts per million. RID = The European Agreement concerning the International Carriage of Dangerous Goods by Rail. TWA = Time Weight Average. UN-number = UN number at transport. vPvB = very Persistent and very Bioaccumulative.

The data contained in this safety data sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. This safety data sheet is neither a Certificate of Analysis (CoA) nor technical data sheet and shall not be mistaken for a specification agreement. Identified uses in this safety data sheet do neither represent an agreement on the corresponding contractual quality of the substance/mixture nor a contractually designated use. It is the responsibility of the recipient of the product to ensure any proprietary rights and existing laws and legislation are observed.

Annex: Exposure Scenarios

Index

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1. Short title of exposure scenario

Compounding
ERC2; PROC1, PROC3, PROC5, PROC8a, PROC8b, PROC9, PROC15

Control of exposure and risk management measures

Contributing exposure scenario	
Use descriptors covered	ERC2: Formulation into mixture
Operational conditions	
Annual amount per site	40.000 kg
Minimum emission days per year	250

Emission factor air	2,5 %
Emission factor water	0,2 %
Emission factor soil	0 %
Receive Surf. Water (Flow Rate).	18.000 m3/d
Dilution factor river	10
Dilution factor coast	100
Risk Management Measures	
Type of STP	Municipal STP
Assumed sewage treatment plant flow (m3/d)	2.000 m3/d
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.1, ECETOC TRA v3.0, Environment
Risk Characterization Ratio (RCR)	0,926409
	Risk from environmental exposure is driven by freshwater sediment.
Maximum amount of safe use	172,7 kg/d
Risk from environmental exposure is driven by freshwater sediment.	

Contributing exposure scenario	
Use descriptors covered	PROC1: Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions. As no toxicological hazard was identified no human related (worker/consumer) exposure assessment and risk characterization was performed.

Contributing exposure scenario	
Use descriptors covered	PROC3: Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition As no toxicological hazard was identified no human related (worker/consumer) exposure assessment and risk characterization was performed.

Contributing exposure scenario	
Use descriptors covered	PROC5: Mixing or blending in batch processes As no toxicological hazard was identified no human related (worker/consumer) exposure assessment and risk

	characterization was performed.

Contributing exposure scenario	
Use descriptors covered	PROC8a: Transfer of substance or mixture (charging and discharging) at non-dedicated facilities As no toxicological hazard was identified no human related (worker/consumer) exposure assessment and risk characterization was performed.

Contributing exposure scenario	
Use descriptors covered	PROC8b: Transfer of substance or mixture (charging and discharging) at dedicated facilities As no toxicological hazard was identified no human related (worker/consumer) exposure assessment and risk characterization was performed.

Contributing exposure scenario	
Use descriptors covered	PROC9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing). As no toxicological hazard was identified no human related (worker/consumer) exposure assessment and risk characterization was performed.

Contributing exposure scenario	
Use descriptors covered	PROC15: Use a laboratory reagent. As no toxicological hazard was identified no human related (worker/consumer) exposure assessment and risk characterization was performed.

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2. Short title of exposure scenario

Formulation
ERC2; PROC1, PROC3, PROC5, PROC8a, PROC8b, PROC9, PROC14, PROC15

Control of exposure and risk management measures

Contributing exposure scenario	
Use descriptors covered	AISE SPERC 2.1.a.v2: AISE SPERC 2.1.a.v2
Operational conditions	
Annual amount used in the EU	360.000 kg

Minimum emission days per year	250
Emission factor air	0 %
Emission factor water	0,01 %
Emission factor soil	0 %
Receive Surf. Water (Flow Rate).	18.000 m3/d
Dilution factor river	10
Dilution factor coast	100

Risk Management Measures	
Wastewater treatment measures considered suitable are, e.g.	Precipitation, Coagulation, Must be eliminated from water by chemical flocculation.
Type of STP	Municipal STP
Assumed sewage treatment plant flow (m3/d)	2.000 m3/d

Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.1, ECETOC TRA v3.0, Environment
Risk Characterization Ratio (RCR)	0,487628
	Risk from environmental exposure is driven by freshwater sediment.
Maximum amount of safe use	2.953,1 kg/d
Risk from environmental exposure is driven by freshwater sediment.	

Contributing exposure scenario	
Use descriptors covered	AISE SPERC 2.1.b.v2: AISE SPERC 2.1.b.v2
Operational conditions	
Annual amount per site	80.000 kg
Minimum emission days per year	250
Emission factor air	0 %
Emission factor water	0,1 %
Emission factor soil	0 %
Receive Surf. Water (Flow Rate).	18.000 m3/d
Dilution factor river	10

Dilution factor coast	100
Risk Management Measures	
Wastewater treatment measures considered suitable are, e.g.	Precipitation, Coagulation, Must be eliminated from water by chemical flocculation.
Type of STP	Municipal STP
Assumed sewage treatment plant flow (m3/d)	2.000 m3/d
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.1, ECETOC TRA v3.0, Environment
Risk Characterization Ratio (RCR)	0,926409
	Risk from environmental exposure is driven by freshwater sediment.
Maximum amount of safe use	345,4 kg/d
Risk from environmental exposure is driven by freshwater sediment.	

Contributing exposure scenario	
Use descriptors covered	AISE SPERC 2.1.c.v2: AISE SPERC 2.1.c.v2
Operational conditions	
Annual amount per site	40.000 kg
Minimum emission days per year	250
Emission factor air	0 %
Emission factor water	0,2 %
Emission factor soil	0 %
Receive Surf. Water (Flow Rate).	18.000 m3/d
Dilution factor river	10
Dilution factor coast	100
Risk Management Measures	
Wastewater treatment measures considered suitable are, e.g.	Precipitation, Coagulation, Must be eliminated from water by chemical flocculation.
Type of STP	Municipal STP
Assumed sewage treatment plant flow (m3/d)	2.000 m3/d
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.1, ECETOC TRA v3.0, Environment
Risk Characterization Ratio (RCR)	0,926409

	Risk from environmental exposure is driven by freshwater sediment.
Maximum amount of safe use	172,7 kg/d
Risk from environmental exposure is driven by freshwater sediment.	

Contributing exposure scenario		
Use descriptors covered	AISE SPERC 2.1.j.v2: AISE SPERC 2.1.j.v2	
Operational conditions		
Annual amount per site	80.000 kg	
Minimum emission days per year	250	
Emission factor air	0 %	
Emission factor water	0,1 %	
Emission factor soil	0 %	
Receive Surf. Water (Flow Rate).	18.000 m3/d	
Dilution factor river	10	
Dilution factor coast	100	
Risk Management Measures		
Wastewater treatment measures considered suitable are, e.g.		Nanofiltration (NR), Ultrafiltration (UF) or Reverse Osmosis (OR), Coagulation, Must be eliminated from water by chemical flocculation.
Type of STP		Municipal STP
Assumed sewage treatment plant flow (m3/d)		2.000 m3/d
Exposure estimate and reference to its source		
Assessment method	EASY TRA v4.1, ECETOC TRA v3.0, Environment	
Risk Characterization Ratio (RCR)	0,926409	
	Risk from environmental exposure is driven by freshwater sediment.	
Maximum amount of safe use	345,4 kg/d	
Risk from environmental exposure is driven by freshwater sediment.		

Contributing exposure scenario	
Use descriptors covered	AISE SPERC 2.1.k.v2: AISE SPERC 2.1.k.v2

Operational conditions	
Annual amount per site	40.000 kg
Minimum emission days per year	250
Emission factor air	0 %
Emission factor water	0,2 %
Emission factor soil	0 %
Receive Surf. Water (Flow Rate).	18.000 m3/d
Dilution factor river	10
Dilution factor coast	100
Risk Management Measures	
Wastewater treatment measures considered suitable are, e.g.	Nanofiltration (NR), Ultrafiltration (UF) or Reverse Osmosis (OR), Coagulation, Must be eliminated from water by chemical flocculation.
Type of STP	Municipal STP
Assumed sewage treatment plant flow (m3/d)	2.000 m3/d
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.1, ECETOC TRA v3.0, Environment
Risk Characterization Ratio (RCR)	0,926409
	Risk from environmental exposure is driven by freshwater sediment.
Maximum amount of safe use	172,7 kg/d
Risk from environmental exposure is driven by freshwater sediment.	

Contributing exposure scenario	
Use descriptors covered	AISE SPERC 2.1.l.v2: AISE SPERC 2.1.l.v2
Operational conditions	
Annual amount per site	20.000 kg
Minimum emission days per year	250
Emission factor air	0 %
Emission factor water	0,4 %
Emission factor soil	0 %

Receive Surf. Water (Flow Rate).	18.000 m3/d
Dilution factor river	10
Dilution factor coast	100
Risk Management Measures	
Wastewater treatment measures considered suitable are, e.g.	Nanofiltration (NR), Ultrafiltration (UF) or Reverse Osmosis (OR), Coagulation, Must be eliminated from water by chemical flocculation.
Type of STP	Municipal STP
Assumed sewage treatment plant flow (m3/d)	2.000 m3/d
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.1, ECETOC TRA v3.0, Environment
Risk Characterization Ratio (RCR)	0,926409
	Risk from environmental exposure is driven by freshwater sediment.
Maximum amount of safe use	86,4 kg/d
Risk from environmental exposure is driven by freshwater sediment.	

Contributing exposure scenario	
Use descriptors covered	ERC2: Formulation into mixture
Operational conditions	
Annual amount used in the EU	160.000 kg
Minimum emission days per year	250
Emission factor air	0 %
Emission factor water	0 %
Emission factor soil	0,01 %
Receive Surf. Water (Flow Rate).	18.000 m3/d
Dilution factor river	10
Dilution factor coast	100
Risk Management Measures	
Type of STP	Municipal STP
Assumed sewage treatment plant flow (m3/d)	2.000 m3/d

Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.1, ECETOC TRA v3.0, Environment
Risk Characterization Ratio (RCR)	0,128626
	Risk from environmental exposure is driven by freshwater sediment.
Maximum amount of safe use	4.975,7 kg/d
Risk from environmental exposure is driven by freshwater sediment.	

Contributing exposure scenario	
Use descriptors covered	ERC2: Formulation into mixture
Operational conditions	
Annual amount per site	4.000 kg
Minimum emission days per year	250
Emission factor air	0 %
Emission factor water	2 %
Emission factor soil	0 %
Receive Surf. Water (Flow Rate).	18.000 m3/d
Dilution factor river	10
Dilution factor coast	100
Risk Management Measures	
Type of STP	Municipal STP
Assumed sewage treatment plant flow (m3/d)	2.000 m3/d
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.1, ECETOC TRA v3.0, Environment
Risk Characterization Ratio (RCR)	0,926409
	Risk from environmental exposure is driven by freshwater sediment.
Maximum amount of safe use	17,3 kg/d
Risk from environmental exposure is driven by freshwater sediment.	

Contributing exposure scenario	
Use descriptors covered	PROC1: Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions. As no toxicological hazard was identified no human related

	(worker/consumer) exposure assessment and risk characterization was performed.

Contributing exposure scenario	
Use descriptors covered	PROC3: Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition As no toxicological hazard was identified no human related (worker/consumer) exposure assessment and risk characterization was performed.

Contributing exposure scenario	
Use descriptors covered	PROC5: Mixing or blending in batch processes As no toxicological hazard was identified no human related (worker/consumer) exposure assessment and risk characterization was performed.

Contributing exposure scenario	
Use descriptors covered	PROC8a: Transfer of substance or mixture (charging and discharging) at non-dedicated facilities As no toxicological hazard was identified no human related (worker/consumer) exposure assessment and risk characterization was performed.

Contributing exposure scenario	
Use descriptors covered	PROC8b: Transfer of substance or mixture (charging and discharging) at dedicated facilities As no toxicological hazard was identified no human related (worker/consumer) exposure assessment and risk characterization was performed.

Contributing exposure scenario	
Use descriptors covered	PROC9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing). As no toxicological hazard was identified no human related (worker/consumer) exposure assessment and risk characterization was performed.

Contributing exposure scenario	
Use descriptors covered	PROC14: Tabletting, compression, extrusion, pelletisation, granulation As no toxicological hazard was identified no human related

	(worker/consumer) exposure assessment and risk characterization was performed.

Contributing exposure scenario	
Use descriptors covered	PROC15: Use a laboratory reagent. As no toxicological hazard was identified no human related (worker/consumer) exposure assessment and risk characterization was performed.

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3. Short title of exposure scenario

Use in Cleaning Agents, (use in industrial settings)
ERC4; PROC1, PROC2, PROC4, PROC7, PROC8b, PROC10, PROC13

Control of exposure and risk management measures

Contributing exposure scenario	
Use descriptors covered	ERC4: Use of non-reactive processing aid at industrial site (no inclusion into or onto article) This industrial use is not assessed separately as potential releases are already covered by the assessment of other industrial uses.
Operational conditions	

Contributing exposure scenario	
Use descriptors covered	PROC1: Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions. As no toxicological hazard was identified no human related (worker/consumer) exposure assessment and risk characterization was performed.

Contributing exposure scenario	
Use descriptors covered	PROC2: Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions As no toxicological hazard was identified no human related (worker/consumer) exposure assessment and risk characterization was performed.

Contributing exposure scenario

Use descriptors covered	PROC4: Chemical production where opportunity for exposure arises As no toxicological hazard was identified no human related (worker/consumer) exposure assessment and risk characterization was performed.

Contributing exposure scenario	
Use descriptors covered	PROC7: Industrial spraying As no toxicological hazard was identified no human related (worker/consumer) exposure assessment and risk characterization was performed.

Contributing exposure scenario	
Use descriptors covered	PROC8b: Transfer of substance or mixture (charging and discharging) at dedicated facilities As no toxicological hazard was identified no human related (worker/consumer) exposure assessment and risk characterization was performed.

Contributing exposure scenario	
Use descriptors covered	PROC10: Roller application or brushing As no toxicological hazard was identified no human related (worker/consumer) exposure assessment and risk characterization was performed.

Contributing exposure scenario	
Use descriptors covered	PROC13: Treatment of articles by dipping and pouring. As no toxicological hazard was identified no human related (worker/consumer) exposure assessment and risk characterization was performed.

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4. Short title of exposure scenario

Use as an intermediate
ERC6a; PROC1, PROC2, PROC3, PROC8b, PROC9, PROC15

Control of exposure and risk management measures

Contributing exposure scenario	
Use descriptors covered	ERC6a: Use of intermediate

Operational conditions	
Annual amount used in the EU	3.400.000 kg
Minimum emission days per year	100
Emission factor air	5 %
Emission factor water	2 %
Emission factor soil	0,1 %
Receive Surf. Water (Flow Rate).	43.541 m3/min
Dilution factor river	187,61
Dilution factor coast	1.876,07

Risk Management Measures	
Soil treatment measures considered suitable are, e.g.	No application of sludge to soil
Type of STP	Municipal STP
Assumed sewage treatment plant flow (m3/d)	336.000 m3/d

Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.1, ECETOC TRA v3.0, Environment
Risk Characterization Ratio (RCR)	0,667303
	Risk from environmental exposure is driven by freshwater sediment.
Maximum amount of safe use	50.951,3 kg/d
Risk from environmental exposure is driven by freshwater sediment.	

Contributing exposure scenario	
Use descriptors covered	PROC1: Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions. As no toxicological hazard was identified no human related (worker/consumer) exposure assessment and risk characterization was performed.

Contributing exposure scenario	
Use descriptors covered	PROC2: Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions As no toxicological hazard was identified no human related (worker/consumer) exposure assessment and risk characterization was performed.

Contributing exposure scenario	
Use descriptors covered	PROC3: Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition As no toxicological hazard was identified no human related (worker/consumer) exposure assessment and risk characterization was performed.

Contributing exposure scenario	
Use descriptors covered	PROC8b: Transfer of substance or mixture (charging and discharging) at dedicated facilities As no toxicological hazard was identified no human related (worker/consumer) exposure assessment and risk characterization was performed.

Contributing exposure scenario	
Use descriptors covered	PROC9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing). As no toxicological hazard was identified no human related (worker/consumer) exposure assessment and risk characterization was performed.

Contributing exposure scenario	
Use descriptors covered	PROC15: Use a laboratory reagent. As no toxicological hazard was identified no human related (worker/consumer) exposure assessment and risk characterization was performed.

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5. Short title of exposure scenario

Use in/as Surface care and Polishes, (use in professional settings)
ERC8a, ERC8d; PROC1, PROC2, PROC4, PROC8a, PROC8b, PROC10, PROC11, PROC13

Control of exposure and risk management measures

Contributing exposure scenario	
Use descriptors covered	AISE SPERC 8a.1.a.v2: AISE SPERC 8a.1.a.v2
Operational conditions	
Annual amount used in the EU	800.000 kg

Minimum emission days per year	365
Emission factor air	0 %
Emission factor water	100 %
Emission factor soil	0 %
Receive Surf. Water (Flow Rate).	18.000 m3/d
Dilution factor river	10
Dilution factor coast	100
Risk Management Measures	
Type of STP	Municipal STP
Assumed sewage treatment plant flow (m3/d)	2.000 m3/d
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.1, ECETOC TRA v3.0, Environment
Risk Characterization Ratio (RCR)	0,292554
	Risk from environmental exposure is driven by freshwater sediment.
Maximum amount of safe use	0,224757 kg/d
Risk from environmental exposure is driven by freshwater sediment.	

Contributing exposure scenario	
Use descriptors covered	AISE SPERC 8a.1.a.v1: AISE SPERC 8a.1.a.v1
Operational conditions	
Annual amount used in the EU	800.000 kg
Minimum emission days per year	365
Emission factor air	0 %
Emission factor water	100 %
Emission factor soil	0 %
Receive Surf. Water (Flow Rate).	18.000 m3/d
Dilution factor river	10
Dilution factor coast	100

Risk Management Measures	
Type of STP	Municipal STP
Assumed sewage treatment plant flow (m3/d)	2.000 m3/d
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.1, ECETOC TRA v3.0, Environment
Risk Characterization Ratio (RCR)	0,292554
	Risk from environmental exposure is driven by freshwater sediment.
Maximum amount of safe use	0,224757 kg/d
Risk from environmental exposure is driven by freshwater sediment.	

Contributing exposure scenario	
Use descriptors covered	PROC1: Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions. As no toxicological hazard was identified no human related (worker/consumer) exposure assessment and risk characterization was performed.

Contributing exposure scenario	
Use descriptors covered	PROC2: Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions As no toxicological hazard was identified no human related (worker/consumer) exposure assessment and risk characterization was performed.

Contributing exposure scenario	
Use descriptors covered	PROC4: Chemical production where opportunity for exposure arises As no toxicological hazard was identified no human related (worker/consumer) exposure assessment and risk characterization was performed.

Contributing exposure scenario	
Use descriptors covered	PROC8a: Transfer of substance or mixture (charging and discharging) at non-dedicated facilities As no toxicological hazard was identified no human related (worker/consumer) exposure assessment and risk characterization was performed.

Contributing exposure scenario

Use descriptors covered	PROC8b: Transfer of substance or mixture (charging and discharging) at dedicated facilities As no toxicological hazard was identified no human related (worker/consumer) exposure assessment and risk characterization was performed.

Contributing exposure scenario	
Use descriptors covered	PROC10: Roller application or brushing As no toxicological hazard was identified no human related (worker/consumer) exposure assessment and risk characterization was performed.

Contributing exposure scenario	
Use descriptors covered	PROC11: Non industrial spraying As no toxicological hazard was identified no human related (worker/consumer) exposure assessment and risk characterization was performed.

Contributing exposure scenario	
Use descriptors covered	PROC13: Treatment of articles by dipping and pouring. As no toxicological hazard was identified no human related (worker/consumer) exposure assessment and risk characterization was performed.

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6. Short title of exposure scenario

Use in/as Air care products
ERC8a; PC3

Control of exposure and risk management measures

Contributing exposure scenario	
Use descriptors covered	AISE SPERC 8a.1.a.v2: AISE SPERC 8a.1.a.v2
Operational conditions	
Annual amount used in the EU	800.000 kg
Minimum emission days per year	365
Emission factor air	0 %
Emission factor water	100 %

Emission factor soil	0 %
Receive Surf. Water (Flow Rate).	18.000 m3/d
Dilution factor river	10
Dilution factor coast	100
Risk Management Measures	
Type of STP	Municipal STP
Assumed sewage treatment plant flow (m3/d)	2.000 m3/d
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.1, ECETOC TRA v3.0, Environment
Risk Characterization Ratio (RCR)	0,292554
	Risk from environmental exposure is driven by freshwater sediment.
Maximum amount of safe use	0,224757 kg/d
Risk from environmental exposure is driven by freshwater sediment.	

Contributing exposure scenario	
Use descriptors covered	PC3: Air care products. As no toxicological hazard was identified no human related (worker/consumer) exposure assessment and risk characterization was performed.
Operational conditions	
Vapour pressure of the substance during use	7,2 Pa
Process temperature	20 °C

Contributing exposure scenario	
Use descriptors covered	PC3: Air care products. As no toxicological hazard was identified no human related (worker/consumer) exposure assessment and risk characterization was performed.
Operational conditions	
Vapour pressure of the substance during use	7,2 Pa
Process temperature	20 °C

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7. Short title of exposure scenario

Use in cosmetics
ERC8a; PC28, PC39

Control of exposure and risk management measures

Contributing exposure scenario		
Use descriptors covered	AISE SPERC 8a.1.a.v2: AISE SPERC 8a.1.a.v2	
Operational conditions		
Annual amount used in the EU	800.000 kg	
Minimum emission days per year	365	
Emission factor air	0 %	
Emission factor water	100 %	
Emission factor soil	0 %	
Receive Surf. Water (Flow Rate).	18.000 m3/d	
Dilution factor river	10	
Dilution factor coast	100	
Risk Management Measures		
Type of STP		Municipal STP
Assumed sewage treatment plant flow (m3/d)		2.000 m3/d
Exposure estimate and reference to its source		
Assessment method	EASY TRA v4.1, ECETOC TRA v3.0, Environment	
Risk Characterization Ratio (RCR)	0,292554	
	Risk from environmental exposure is driven by freshwater sediment.	
Maximum amount of safe use	0,224757 kg/d	
Risk from environmental exposure is driven by freshwater sediment.		

Contributing exposure scenario	
Use descriptors covered	PC28: Perfumes, Fragrances. As no toxicological hazard was identified no human related (worker/consumer) exposure assessment and risk characterization was performed.
Operational conditions	
Vapour pressure of the substance	7,2 Pa

during use	
Process temperature	20 °C

Contributing exposure scenario	
Use descriptors covered	PC39: Cosmetics, personal care products. As no toxicological hazard was identified no human related (worker/consumer) exposure assessment and risk characterization was performed.
Operational conditions	
Vapour pressure of the substance during use	7,2 Pa
Process temperature	20 °C

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8. Short title of exposure scenario

Use in/as Surface care and Polishes
ERC8a, ERC8d; PC31, PC35

Control of exposure and risk management measures

Contributing exposure scenario		
Use descriptors covered	AISE SPERC 8a.1.a.v2: AISE SPERC 8a.1.a.v2	
Operational conditions		
Annual amount used in the EU	800.000 kg	
Minimum emission days per year	365	
Emission factor air	0 %	
Emission factor water	100 %	
Emission factor soil	0 %	
Receive Surf. Water (Flow Rate).	18.000 m3/d	
Dilution factor river	10	
Dilution factor coast	100	
Risk Management Measures		
Type of STP		Municipal STP
Assumed sewage treatment plant flow (m3/d)		2.000 m3/d

Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.1, ECETOC TRA v3.0, Environment
Risk Characterization Ratio (RCR)	0,292554
	Risk from environmental exposure is driven by freshwater sediment.
Maximum amount of safe use	0,224757 kg/d
Risk from environmental exposure is driven by freshwater sediment.	

Contributing exposure scenario	
Use descriptors covered	AISE SPERC 8a.1.a.v1: AISE SPERC 8a.1.a.v1
Operational conditions	
Annual amount used in the EU	800.000 kg
Minimum emission days per year	365
Emission factor air	0 %
Emission factor water	100 %
Emission factor soil	0 %
Receive Surf. Water (Flow Rate).	18.000 m3/d
Dilution factor river	10
Dilution factor coast	100
Risk Management Measures	
Type of STP	Municipal STP
Assumed sewage treatment plant flow (m3/d)	2.000 m3/d
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.1, ECETOC TRA v3.0, Environment
Risk Characterization Ratio (RCR)	0,292554
	Risk from environmental exposure is driven by freshwater sediment.
Maximum amount of safe use	0,224757 kg/d
Risk from environmental exposure is driven by freshwater sediment.	

Contributing exposure scenario	
Use descriptors covered	PC31: Polishes and Wax Blends. As no toxicological hazard was identified no human related (worker/consumer) exposure assessment and risk characterization was performed.

Operational conditions	
Vapour pressure of the substance during use	7,2 Pa
Process temperature	20 °C

Contributing exposure scenario	
Use descriptors covered	PC35: Washing and Cleaning Products (including solvent based products). As no toxicological hazard was identified no human related (worker/consumer) exposure assessment and risk characterization was performed.
Operational conditions	
Vapour pressure of the substance during use	7,2 Pa
Process temperature	20 °C

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9. Short title of exposure scenario

other consumer applications than fragrance
ERC8a, ERC8d; PC8

Control of exposure and risk management measures

Contributing exposure scenario	
Use descriptors covered	AISE SPERC 8a.1.a.v2: AISE SPERC 8a.1.a.v2
Operational conditions	
Annual amount used in the EU	800.000 kg
Minimum emission days per year	365
Emission factor air	0 %
Emission factor water	100 %
Emission factor soil	0 %
Receive Surf. Water (Flow Rate).	18.000 m3/d
Dilution factor river	10
Dilution factor coast	100

Risk Management Measures	
Type of STP	Municipal STP
Assumed sewage treatment plant flow (m3/d)	2.000 m3/d
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.1, ECETOC TRA v3.0, Environment
Risk Characterization Ratio (RCR)	0,292554
	Risk from environmental exposure is driven by freshwater sediment.
Maximum amount of safe use	0,224757 kg/d
Risk from environmental exposure is driven by freshwater sediment.	

Contributing exposure scenario	
Use descriptors covered	AISE SPERC 8a.1.a.v1: AISE SPERC 8a.1.a.v1
Operational conditions	
Annual amount used in the EU	800.000 kg
Minimum emission days per year	365
Emission factor air	0 %
Emission factor water	100 %
Emission factor soil	0 %
Receive Surf. Water (Flow Rate).	18.000 m3/d
Dilution factor river	10
Dilution factor coast	100
Risk Management Measures	
Type of STP	Municipal STP
Assumed sewage treatment plant flow (m3/d)	2.000 m3/d
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.1, ECETOC TRA v3.0, Environment
Risk Characterization Ratio (RCR)	0,292554
	Risk from environmental exposure is driven by freshwater sediment.
Maximum amount of safe use	0,224757 kg/d
Risk from environmental exposure is driven by freshwater sediment.	

Contributing exposure scenario

Use descriptors covered	PC8: Biocidal Products. As no toxicological hazard was identified no human related (worker/consumer) exposure assessment and risk characterization was performed.
Operational conditions	
Vapour pressure of the substance during use	7,2 Pa
Process temperature	20 °C

Contributing exposure scenario	
Use descriptors covered	PC8: Biocidal Products. As no toxicological hazard was identified no human related (worker/consumer) exposure assessment and risk characterization was performed.
Operational conditions	
Vapour pressure of the substance during use	7,2 Pa
Process temperature	20 °C

Contributing exposure scenario	
Use descriptors covered	PC8: Biocidal Products. As no toxicological hazard was identified no human related (worker/consumer) exposure assessment and risk characterization was performed.
Operational conditions	
Vapour pressure of the substance during use	7,2 Pa
Process temperature	20 °C

Contributing exposure scenario	
Use descriptors covered	PC8: Biocidal Products. As no toxicological hazard was identified no human related (worker/consumer) exposure assessment and risk characterization was performed.
Operational conditions	
Vapour pressure of the substance during use	7,2 Pa
Process temperature	20 °C

Contributing exposure scenario

Use descriptors covered	PC8: Biocidal Products. As no toxicological hazard was identified no human related (worker/consumer) exposure assessment and risk characterization was performed.
Operational conditions	
Vapour pressure of the substance during use	7,2 Pa
Process temperature	20 °C

Contributing exposure scenario	
Use descriptors covered	PC8: Biocidal Products. As no toxicological hazard was identified no human related (worker/consumer) exposure assessment and risk characterization was performed.
Operational conditions	
Vapour pressure of the substance during use	7,2 Pa
Process temperature	20 °C

Contributing exposure scenario	
Use descriptors covered	PC8: Biocidal Products. As no toxicological hazard was identified no human related (worker/consumer) exposure assessment and risk characterization was performed.
Operational conditions	
Vapour pressure of the substance during use	7,2 Pa
Process temperature	20 °C

Contributing exposure scenario	
Use descriptors covered	PC8: Biocidal Products. As no toxicological hazard was identified no human related (worker/consumer) exposure assessment and risk characterization was performed.
Operational conditions	
Vapour pressure of the substance during use	7,2 Pa
Process temperature	20 °C

Contributing exposure scenario

Use descriptors covered	PC8: Biocidal Products. As no toxicological hazard was identified no human related (worker/consumer) exposure assessment and risk characterization was performed.
Operational conditions	
Vapour pressure of the substance during use	7,2 Pa
Process temperature	20 °C

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