Safety Data Sheet
Super Shampoo Concentrato

Safety Data Sheet dated 27/9/2024, version 37

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

1.1. Product identifier

Mixture identification:

Trade name: Super Shampoo Concentrato

Trade code: 8345

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

Recommended use:

Detergent/cleaner

Uses advised against:

Strictly adhere to the recommended uses.

1.3. Details of the supplier of the safety data sheet

Supplier:

Arexons S.p.A.

via Antica di Cassano, 23, 20063

Cernusco sul Naviglio (MI), Italy

Arexons S.p.A.

Tel. +39 (0)2/924361 - Fax +39 (0)2/92436306

Competent person responsible for the safety data sheet:

arexons@arexons.it

1.4. Emergency telephone number

Arexons S.p.A.

Tel. +39 (0)2/924361 - Fax +39 (0)2/92436306

In England and Wales: NHS 111 - dial 111

In Scotland: NHS 24 - dial 111

In Ireland: emergency number 112

In South Africa: Poison Information Helpline 0861 555 777

In Malta: emergency number 112

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

EC regulation criteria 1272/2008 (CLP):

Warning, Skin Irrit. 2, Causes skin irritation.

Warning, Eye Irrit. 2, Causes serious eye irritation.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Hazard pictograms:

Warning

Hazard statements:

H315 Causes skin irritation.

H319 Causes serious eye irritation.

Precautionary statements:

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P103 Read carefully and follow all instructions.

P264 Wash hands thoroughly after handling.

P280 Wear protective gloves/clothing and eye/face protection.

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

Special Provisions:

PACK1 The packing must be featured by a safety lock for children.
PACK2 The packing must have tactive indications of danger for blind people.
EUH208 Contains 1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one. May produce an allergic reaction.

Contains

Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs.
Alcohols, C12-14, ethoxylated, sulfates, sodium salts 1-2,5 moles ethoxylated

Special provisions according to Annex XVII of REACH and subsequent amendments:

None

Regulation (EC) nr 648/2004 (detergents).
Product contents:

Non-ionic surfactants	< 5 %
Anionic surfactants	5 - 15 %
Preservatives:	1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one, Laurylamine Dipropylenediamine, Pyridine-2-thiol 1-oxide, sodium salt.

2.3. Other hazards

No PBT, vPvB or endocrine disruptor substances present in concentration >= 0.1%

Other Hazards:

No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances

N.A.

3.2. Mixtures

Hazardous components within the meaning of the CLP regulation and related classification:

stta	Name	Ident. Number		Classification
>= 12,5% - < 15%	Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs.	CAS: EC: REACH No.:	85536-14-7 287-494-3 01-2119490234-40	3.1/4/Oral Acute Tox. 4 H302 3.2/1C Skin Corr. 1C H314 4.1/C3 Aquatic Chronic 3 H412
>= 1% - < 2%	Alcohols, C12-14, ethoxylated, sulfates, sodium salts 1-2,5 moles ethoxylated	CAS: EC: REACH No.:	68891-38-3 500-234-8 01-2119488639-16	3.3/1 Eye Dam. 1 H318 3.2/2 Skin Irrit. 2 H315 4.1/C3 Aquatic Chronic 3 H412 Specific Concentration Limits: 5% <= C < 10%: Eye Irrit. 2 H319 C >= 10%: Eye Dam. 1 H318
>= 0,02% - < 0,05%	2,2'-iminodiethanol; diethanolamine	Index number: CAS: EC:	603-071-00-1 111-42-2 203-868-0	3.1/4/Oral Acute Tox. 4 H302 3.9/2 STOT RE 2 H373 3.2/2 Skin Irrit. 2 H315 3.3/1 Eye Dam. 1 H318 4.1/C3 Aquatic Chronic 3 H412
>= 0,01% - < 0,02%	1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one	Index number: CAS:	613-088-00-6 2634-33-5	3.1/4/Oral Acute Tox. 4 H302 3.1/2/Inhal Acute Tox. 2 H330 3.2/2 Skin Irrit. 2 H315

		EC:	220-120-9	3.4.2/1A Skin Sens. 1A H317 3.3/1 Eye Dam. 1 H318 4.1/A1 Aquatic Acute 1 H400 4.1/C1 Aquatic Chronic 1 H410 Specific Concentration Limits: C >= 0,036%: Skin Sens. 1A H317 Acute Toxicity Estimate: ATE - Oral 450 mg/kg bw ATE - Inhalation (Dust/mist) 0,21 mg/l
>= 0,001% - < 0,005%	1-methoxy-2-propanol; monopropylene glycol methyl ether	Index number: CAS: EC: REACH No.:	603-064-00-3 107-98-2 203-539-1 01-2119457435-35	2.6/3 Flam. Liq. 3 H226 3.8/3 STOT SE 3 H336

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.
Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap.
Wash thoroughly the body (shower or bath).
Remove contaminated clothing immediately and dispose off safely.
After contact with skin, wash immediately with soap and plenty of water.

In case of eyes contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an opthalmologist immediately.
Protect uninjured eye.

In case of Ingestion:

Do not under any circumstances induce vomiting. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

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

None

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

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).
Treatment:
None

SECTION 5: Firefighting measures

5.1. Extinguishing media

Appropriate Extinguishing Media:
To carbon dioxide.
To dust.
Foam
Water spray.
Not Recommended Extinguishing Media:
Do not use direct water jets.

5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.
Burning produces heavy smoke.

5.3. Advice for firefighters

Normal fire-fighting clothing, such as an open-circuit compressed air breathing apparatus (EN 137), flame-resistant suit (EN469), flame-resistant gloves (EN 659) and firefighter's boots (HO A29 or A30).

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.
Remove persons to safety.
See protective measures under point 7 and 8.

6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.
Retain contaminated washing water and dispose it.
In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.
Suitable material for taking up: absorbing material, organic, sand

6.3. Methods and material for containment and cleaning up

For cleaning up:
Avoid flame and/or spark near leak and produced waste. Do not smoke. In case of large spills dike,
absorb and shovel up into suitable containers for disposal. Contain small spills with absorbent material.
Put dirty material in suitable container. Dispose of dirty material in accordance with local or national
regulations.

6.4. Reference to other sections

See also section 8 and 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.
Don't use empty container before they have been cleaned.
Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.
See also section 8 for recommended protective equipment.
Advice on general occupational hygiene:
Contamined clothing should be changed before entering eating areas.
Do not eat or drink while working.

7.2. Conditions for safe storage, including any incompatibilities

Only store in the original container.
Keep away from food, drink and feed.
None in particular.
Instructions as regards storage premises:
Adequately ventilated premises.

7.3. Specific end use(s)

None in particular

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

2,2'-iminodiethanol; diethanolamine - CAS: 111-42-2
ACGIH - TWA(8h): 1 mg/m3 - Notes: (IFV), Skin, A3 - Liver and kidney dam
1-methoxy-2-propanol; monopropylene glycol methyl ether - CAS: 107-98-2

EU - TWA(8h): 375 mg/m3, 100 ppm - STEL: 563 mg/m3, 150 ppm - Notes: Skin
ACGIH - TWA(8h): 50 ppm - STEL: 100 ppm - Notes: A4 - Eye and URT irr

DNEL Exposure Limit Values

Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs. - CAS: 85536-14-7

Worker Industry: 7.6 mg/m3 - Consumer: 1.3 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, systemic effects
Consumer: 0.425 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects
Worker Industry: 119 mg/kg - Consumer: 42.5 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects

Alcohols, C12-14, ethoxylated, sulfates, sodium salts 1-2,5 moles ethoxylated - CAS: 68891-38-3

Consumer: 15 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects
Worker Professional: 175 mg/m3 - Consumer: 52 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, systemic effects
Worker Professional: 2750 mg/kg - Consumer: 1650 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects
Worker Professional: 0.132 03 - Consumer: 0.079 03 - Exposure: Human Dermal - Frequency: Long Term, local effects

1-methoxy-2-propanol; monopropylene glycol methyl ether - CAS: 107-98-2

Consumer: 3.3 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects
Worker Professional: 369 mg/m3 - Consumer: 43.9 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, systemic effects
Worker Professional: 50.6 mg/kg - Consumer: 18.1 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects
Worker Professional: 553.5 mg/m3 - Exposure: Human Inhalation - Frequency: Short Term, local effects

PNEC Exposure Limit Values

Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs. - CAS: 85536-14-7

Target: Fresh Water - Value: 0.268 mg/l
Target: Marine water - Value: 0.027 mg/l
Target: 09 - Value: 3.43 mg/l
Target: Freshwater sediments - Value: 8.1 mg/kg
Target: Marine water sediments - Value: 6.8 mg/kg

Alcohols, C12-14, ethoxylated, sulfates, sodium salts 1-2,5 moles ethoxylated - CAS: 68891-38-3

Target: Fresh Water - Value: 0.24 mg/l
Target: Marine water - Value: 0.024 mg/l
Target: Freshwater sediments - Value: 0.917 mg/kg
Target: Marine water sediments - Value: 0.092 mg/kg
Target: 09 - Value: 10000 mg/l

1-methoxy-2-propanol; monopropylene glycol methyl ether - CAS: 107-98-2

Target: Fresh Water - Value: 10 mg/l
Target: Freshwater sediments - Value: 52.3 mg/kg
Target: Marine water - Value: 1 mg/l
Target: Marine water sediments - Value: 5.2 mg/kg
Target: Soil (agricultural) - Value: 4.59 mg/l

8.2. Exposure controls

Eye protection:

Safety goggles.
Compliant with EN 166

Protection for skin:

protective clothing

Protection for hands:

Nitrile or Viton gloves.
Compliant with EN 374.
Thickness: Cuff 0.10 mm; Palm 0.12 mm; Fingers 0.145 mm

Respiratory protection:

Use a suitable respiratory protection device.
Thermal Hazards:
None
Environmental exposure controls:
None
Appropriate engineering controls:
None

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties	Value	Method:	Notes:
Physical state:	Liquid	--	--
Colour:	Green	--	--
Odour:	Characteristic	--	--
Melting point/freezing point:	N.A.	--	--
Boiling point or initial boiling point and boiling range:	>100°C	ASTM D2887	--
Flammability:	N.A.	--	--
Lower and upper explosion limit:	N.A.	--	--
Flash point:	not flammable	IP 170	--
Auto-ignition temperature:	N.A.	--	--
Decomposition temperature:	N.A.	--	--
pH:	7.0	ASTM D1287	--
Kinematic viscosity:	N.A.	--	--
Solubility in water:	Soluble	--	--
Solubility in oil:	N.A.	--	--
Partition coefficient n-octanol/water (log value):	N.A.	--	--
Vapour pressure:	N.A.	--	--
Density and/or relative density:	1.29 g/cm3	ASTM D 4052-96	--
Relative vapour density:	N.A.	--	--
Particle characteristics:			
Particle size:	N.A.	--	--

9.2. Other information
No other relevant information

Viscosity:	1800 cP	Brookfield (G3 V10)	--

SECTION 10: Stability and reactivity

10.1. Reactivity
Stable under normal conditions
10.2. Chemical stability
Stable under normal conditions
10.3. Possibility of hazardous reactions
It may generate flammable gases on contact with dithiocarbamates, mercaptans and other organic sulphides, elementary metals (alkalis, alkaline earth, powder alloys, vapours), and powerful reducing agents.
It may generate toxic gases on contact with inorganic fluorides, halogenated organic substances, sulphides, nitrides, nitriles, organophosphates, and powerful oxidising agents.
It may catch fire on contact with dithiocarbamates, elementary metals (alkali, alkaline earth, powder alloys, vapours, sheets or bars), and nitrides.
10.4. Conditions to avoid
Stable under normal conditions.
10.5. Incompatible materials
None in particular.
10.6. Hazardous decomposition products
None.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008
Toxicological information of the product:
SUPER SHAMPOO CONCENTRATO ML 1000
a) acute toxicity
Not classified
Based on available data, the classification criteria are not met
b) skin corrosion/irritation
The product is classified: Skin Irrit. 2 H315
Test: oecd 8 - Route: Skin - Species: RHE 61.31 % - Duration: 1h - Notes: not corrosive - Based on available data, the classification criteria are not met
Test: oecd 8 - Route: Skin - Species: RHE 91.33 % - Duration: 3min - Notes: not corrosive - Based on available data, the classification criteria are not met
c) serious eye damage/irritation
The product is classified: Eye Irrit. 2 H319
Test: oecd 9 - Route: EYE - Species: BCOP 12.98 - Notes: not corrosive - Based on available data, the classification criteria are not met
d) respiratory or skin sensitisation
Not classified
Based on available data, the classification criteria are not met
e) germ cell mutagenicity
Not classified
Based on available data, the classification criteria are not met
f) carcinogenicity
Not classified
Based on available data, the classification criteria are not met
g) reproductive toxicity
Not classified
Based on available data, the classification criteria are not met
h) STOT-single exposure

Not classified
Based on available data, the classification criteria are not met
i) STOT-repeated exposure
Not classified
Based on available data, the classification criteria are not met
j) aspiration hazard
Not classified
Based on available data, the classification criteria are not met
Toxicological information of the main substances found in the product:
Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs. - CAS: 85536-14-7
a) acute toxicity:
Test: STA - Route: Oral 510.2 mg/kg
Test: LD50 - Route: Oral - Species: Rat > 300-2000 mg/kg - Classification derived from the classification of the components
Test: LD50 - Route: Skin - Species: Rat > 2000 mg/kg
b) skin corrosion/irritation:
Test: OECD TG 404 - Route: Skin - Species: Rabbit Positive - Classification derived from the classification of the components
c) serious eye damage/irritation:
Test: OECD TG 405 - Route: EYE - Species: Rabbit Positive - Classification derived from the classification of the components
d) respiratory or skin sensitisation:
Test: Skin Sensitization - Species: IND Negative
g) reproductive toxicity:
Test: NOAEL - Route: Oral - Species: Rat 350 mg/kg
Test: arx1 - Species: Rat 300 mg/kg
i) STOT-repeated exposure:
Test: NOAEL - Species: Rat 85 mg/kg
Test: LOAEL - Species: Rat 145 mg/kg
Alcohols, C12-14, ethoxylated, sulfates, sodium salts 1-2,5 moles ethoxylated - CAS: 68891-38-3
a) acute toxicity:
Test: LD50 - Route: Oral > 2870 mg/kg
Test: LD50 - Route: Skin > 2000 mg/kg
2,2'-iminodiethanol; diethanolamine - CAS: 111-42-2
a) acute toxicity:
Test: LD50 - Route: Oral 710 mg/kg
Test: LD50 - Route: Skin 12200 mg/kg
1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one - CAS: 2634-33-5
a) acute toxicity
ATE - Oral 450 mg/kg bw
ATE - Inhalation (Dust/mist) 0,21 mg/l
Test: LD50 - Route: Oral - Species: Rat 1193 mg/kg
Test: LD50 - Route: Skin - Species: Rat 4115 mg/kg
b) skin corrosion/irritation:
Test: Skin Irritant Positive
c) serious eye damage/irritation:
Test: Eye Corrosive Positive
d) respiratory or skin sensitisation:
Test: Skin Sensitization - Route: Skin Positive
1-methoxy-2-propanol; monopropylene glycol methyl ether - CAS: 107-98-2
a) acute toxicity:
Test: LD50 - Route: Oral 5300 mg/kg
Test: LD50 - Route: Skin 13000 mg/kg
Test: LD50 - Route: Inhalation 54.6 mg/l - Duration: 4h

11.2. Information on other hazards
Endocrine disrupting properties:

No endocrine disruptor substances present in concentration >= 0.1%

SECTION 12: Ecological information

12.1. Toxicity

Adopt good working practices, so that the product is not released into the environment.

Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs. - CAS: 85536-14-7

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish > 1-10 mg/l - Duration h: 96

Endpoint: EC50 - Species: Daphnia > 1-10 mg/l - Duration h: 48

b) Aquatic chronic toxicity:

Endpoint: NOEC - Species: Fish 1 mg/l - Duration h: 672

Endpoint: NOEC - Species: Daphnia > 1-10 mg/l - Duration h: 768

Endpoint: NOEC - Species: Algae > 4 mg/l - Duration h: 672

Alcohols, C12-14, ethoxylated, sulfates, sodium salts 1-2,5 moles ethoxylated - CAS: 68891-38-3

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish 7.1 mg/l - Duration h: 96

Endpoint: EC50 - Species: Daphnia 7.4 mg/l - Duration h: 48

Endpoint: EC50 - Species: Algae 27.7 mg/l - Duration h: 72

b) Aquatic chronic toxicity:

Endpoint: NOEC - Species: Fish 0.14 mg/l - Duration h: 672

Endpoint: NOEC - Species: Daphnia 0.27 mg/l - Duration h: 504

Endpoint: NOEC - Species: Algae 0.95 mg/l - Duration h: 72

1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one - CAS: 2634-33-5

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish 2.18 mg/l - Duration h: 96

Endpoint: EC50 - Species: Daphnia 2.94 mg/l - Duration h: 48

Endpoint: CE6 - Species: Algae 0.11 mg/l - Duration h: 72

12.2. Persistence and degradability

None

Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs. - CAS: 85536-14-7

Biodegradability: Readily biodegradable - Test: OECD TG 301 A - Duration: 28gg - %: 70

Alcohols, C12-14, ethoxylated, sulfates, sodium salts 1-2,5 moles ethoxylated - CAS: 68891-38-3

Biodegradability: Readily biodegradable

1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one - CAS: 2634-33-5

Biodegradability: Readily biodegradable - Test: BIOGDG06

1-methoxy-2-propanol; monopropylene glycol methyl ether - CAS: 107-98-2

Biodegradability: Readily biodegradable

12.3. Bioaccumulative potential

Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs. - CAS: 85536-14-7

Bioaccumulation: Not bioaccumulative - Test: arx01

12.4. Mobility in soil

Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs. - CAS: 85536-14-7

Test: Koc 2500

12.5. Results of PBT and vPvB assessment

vPvB Substances: None - PBT Substances: None

12.6. Endocrine disrupting properties

No endocrine disruptor substances present in concentration >= 0.1%

12.7. Other adverse effects

None

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Recover if possible. In so doing, comply with the local and national regulations currently in force.

Additional disposal information:

"Use in accordance with good working practices, avoiding dispersal in the environment.

Do not discharge into drains, ground water or water courses. Comply with current legislation on the protection of water and soil from pollution (Legislative Decree No. 152 of 3/4/2006).
Dispose of used product and containers by handing them over to authorised companies, in accordance with the provisions of
Legislative Decree No. 152/2006 (Consolidated Environmental Act, which replaced the Ronchi Decree) as amended.
The used product is to be considered special waste to be classified in accordance with Directive No. 2008/98/EC on waste and related matters. Recover if possible. Send to authorised disposal plants or incineration under
controlled conditions (152/2006 art. 184).
Act in accordance with the local and national laws in force.
Contaminated packaging must be emptied as far as possible. After cleaning, send to an authorised centre for recycling or disposal."

SECTION 14: Transport information

14.1. UN number or ID number

Not classified as dangerous in the meaning of transport regulations.

14.2. UN proper shipping name
N.A.

14.3. Transport hazard class(es)
N.A.

14.4. Packing group
N.A.

14.5. Environmental hazards
ADR-Enviromental Pollutant: No
IMDG-Marine pollutant: No

14.6. Special precautions for user
N.A.

14.7. Maritime transport in bulk according to IMO instruments
N.A.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
Dir. 98/24/EC (Risks related to chemical agents at work)
Dir. 2000/39/EC (Occupational exposure limit values)
Regulation (EC) n. 1907/2006 (REACH)
Regulation (EC) n. 1272/2008 (CLP)
Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013
Regulation (EU) n. 2020/878
Regulation (EU) n. 286/2011 (ATP 2 CLP)
Regulation (EU) n. 618/2012 (ATP 3 CLP)
Regulation (EU) n. 487/2013 (ATP 4 CLP)
Regulation (EU) n. 944/2013 (ATP 5 CLP)
Regulation (EU) n. 605/2014 (ATP 6 CLP)
Regulation (EU) n. 2015/1221 (ATP 7 CLP)
Regulation (EU) n. 2016/918 (ATP 8 CLP)
Regulation (EU) n. 2016/1179 (ATP 9 CLP)
Regulation (EU) n. 2017/776 (ATP 10 CLP)
Regulation (EU) n. 2018/669 (ATP 11 CLP)
Regulation (EU) n. 2018/1480 (ATP 13 CLP)
Regulation (EU) n. 2019/521 (ATP 12 CLP)
Regulation (EU) n. 2020/217 (ATP 14 CLP)

Regulation (EU) n. 2020/1182 (ATP 15 CLP)
Regulation (EU) n. 2021/643 (ATP 16 CLP)
Regulation (EU) n. 2021/849 (ATP 17 CLP)
Regulation (EU) n. 2022/692 (ATP 18 CLP)

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

Restrictions related to the product:

Restriction 3

Restrictions related to the substances contained:

Restriction 40
Restriction 75

Volatile Organic compounds - VOCs = 0.01 %
Volatile Organic compounds - VOCs = 0.12 g/Kg
Volatile Organic compounds - VOCs = 0.12 g/l

Where applicable, refer to the following regulatory provisions :

Directive 2012/18/EU (Seveso III)
Regulation (EC) nr 648/2004 (detergents).
Dir. 2004/42/EC (VOC directive)

Provisions related to directive EU 2012/18 (Seveso III):

Seveso III category according to Annex 1, part 1

None

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for the mixture.

Substances for which a Chemical Safety Assessment has been carried out:

Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs.
Alcohols, C12-14, ethoxylated, sulfates, sodium salts 1-2,5 moles ethoxylated

SECTION 16: Other information

Text of phrases referred to under heading 3:

H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H412 Harmful to aquatic life with long lasting effects.
H318 Causes serious eye damage.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H373 May cause damage to organs through prolonged or repeated exposure.
H330 Fatal if inhaled.
H317 May cause an allergic skin reaction.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
H226 Flammable liquid and vapour.
H336 May cause drowsiness or dizziness.

Hazard class and hazard category	Code	Description
Flam. Liq. 3	2.6/3	Flammable liquid, Category 3
Acute Tox. 2	3.1/2/Inhal	Acute toxicity (inhalation), Category 2
Acute Tox. 4	3.1/4/Oral	Acute toxicity (oral), Category 4
Skin Corr. 1C	3.2/1C	Skin corrosion, Category 1C

Skin Irrit. 2	3.2/2	Skin irritation, Category 2
Eye Dam. 1	3.3/1	Serious eye damage, Category 1
Eye Irrit. 2	3.3/2	Eye irritation, Category 2
Skin Sens. 1A	3.4.2/1A	Skin Sensitisation, Category 1A
STOT SE 3	3.8/3	Specific target organ toxicity - single exposure, Category 3
STOT RE 2	3.9/2	Specific target organ toxicity - repeated exposure, Category 2
Aquatic Acute 1	4.1/A1	Acute aquatic hazard, category 1
Aquatic Chronic 1	4.1/C1	Chronic (long term) aquatic hazard, category 1
Aquatic Chronic 3	4.1/C3	Chronic (long term) aquatic hazard, category 3

Paragraphs modified from the previous revision:

SECTION 2: Hazards identification
SECTION 9: Physical and chemical properties

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

Classification according to Regulation (EC) Nr. 1272/2008	**Classification procedure**
Skin Irrit. 2, H315	Calculation method
Eye Irrit. 2, H319	Calculation method

This document was prepared by a competent person who has received appropriate training.
Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities
SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

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It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.
This MSDS cancels and replaces any preceding release.

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.
ATE: Acute Toxicity Estimate
ATEmix: Acute toxicity Estimate (Mixtures)
CAS: Chemical Abstracts Service (division of the American Chemical Society).
CLP: Classification, Labeling, Packaging.
DNEL: Derived No Effect Level.
EINECS: European Inventory of Existing Commercial Chemical Substances.

GefStoffVO:	Ordinance on Hazardous Substances, Germany.
GHS:	Globally Harmonized System of Classification and Labeling of Chemicals.
IATA:	International Air Transport Association.
IATA-DGR:	Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
ICAO:	International Civil Aviation Organization.
ICAO-TI:	Technical Instructions by the "International Civil Aviation Organization" (ICAO).
IMDG:	International Maritime Code for Dangerous Goods.
INCI:	International Nomenclature of Cosmetic Ingredients.
KSt:	Explosion coefficient.
LC50:	Lethal concentration, for 50 percent of test population.
LD50:	Lethal dose, for 50 percent of test population.
NA:	Not applicable
PNEC:	Predicted No Effect Concentration.
RID:	Regulation Concerning the International Transport of Dangerous Goods by Rail.
STEL:	Short Term Exposure limit.
STOT:	Specific Target Organ Toxicity.
TLV:	Threshold Limiting Value.
TWA:	Time-weighted average
WGK:	German Water Hazard Class.

Exposure Scenario, 20/08/2019

Substance identity	
Chemical name	BENZENESULFONIC ACID, SEC-C-10-13-ALKYL DERIVS, SODIUM SALTS T. anionico
CAS No.	85536-14-7
EINECS No.	287-494-3

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1. ES 1 Use at industrial site; Various products (PC24, PC35)

1.1 TITLE SECTION

Exposure Scenario name	Cleaning agent
Date - Version	20/08/2019 - 1.0
Life Cycle Stage	Use at industrial site
Main user group	Industrial uses
Sector(s) of use	Industrial uses (SU3)
Product Categories	Lubricants, greases, release products (PC24) - Washing and cleaning products (PC35)
Environment Contributing Scenario	
CS1 Covered by	ERC4
Worker Contributing Scenario	
CS2 Industrial	PROC5 - PROC1 - PROC2 - PROC3 - PROC4 - PROC7 - PROC8a - PROC8b - PROC9 - PROC10 - PROC13

1.2 Conditions of use affecting exposure

1.2. CS1: Environment Contributing Scenario: Covered by (ERC4)

Environmental release categories	Use of non-reactive processing aid at industrial site (no inclusion into or onto article) (ERC4)

Product (article) characteristics

Concentration of substance in product:
Covers percentage substance in the product up to 25 %.

Amount used, frequency and duration of use (or from service life)

Amounts used:
Daily amount per site 50 t

Maximum allowable site tonnage (MSafe): 132657 kg

Release type: Continuous release

Emission days: 20 days per year

Conditions and measures related to sewage treatment plant

STP type:
Municipal Sewage Treatment Plant
Water - minimum efficiency of: = 88 %

Conditions and measures related to treatment of waste (including article waste)

Waste treatment
External treatment and disposal of waste should comply with applicable local and/or national regulations.

Other conditions affecting environmental exposure

Local marine water dilution factor: 100
Local freshwater dilution factor: 10

1.2. CS2: Worker Contributing Scenario: Industrial (PROC5, PROC1, PROC2, PROC3, PROC4, PROC7, PROC8a, PROC8b, PROC9, PROC10, PROC13)

Process Categories	Mixing or blending in batch processes - Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions - Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions - Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or

	processes with equivalent containment condition - Chemical production where opportunity for exposure arises - Industrial spraying - Transfer of substance or mixture (charging and discharging) at non-dedicated facilities - Transfer of substance or mixture (charging and discharging) at dedicated facilities - Transfer of substance or mixture into small containers (dedicated filling line, including weighing) - Roller application or brushing - Treatment of articles by dipping and pouring (PROC5, PROC1, PROC2, PROC3, PROC4, PROC7, PROC8a, PROC8b, PROC9, PROC10, PROC13)

Product (article) characteristics

Physical form of product:

Liquid

Vapour pressure:

< 1E-06 hPa

Concentration of substance in product:

Covers percentage substance in the product up to 25 %.

Amount used, frequency and duration of use/exposure

Duration:

Application duration > 4 h

Frequency:

Covers use up to 1 events per day

Technical and organisational conditions and measures

Technical and organisational measures

Remove spills immediately

Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed.

Conditions and measures related to personal protection, hygiene and health evaluation

Personal protection

Wear suitable gloves tested to EN374.

Wear an impervious suit.

Use eye protection according to EN 166.

Other conditions affecting worker exposure

Indoor use

Additional good practice advice. Obligations according to Article 37(4) of REACH do not apply.

Additional Good Practice Advice:

Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed.

Ensure control measures are regularly inspected and maintained.

1.3 Exposure estimation and reference to its source

1.3. CS1: Environment Contributing Scenario: Covered by (ERC4)

Release route	Release rate	Release estimation method
Air	30 %	ESVOC SPERC 4.4a.v1
Water	0.01 %	ESVOC SPERC 4.4a.v1
soil	0.01 %	ESVOC SPERC 4.4a.v1

protection target	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
freshwater	0.0058 mg/L	EUSES	0.0219

freshwater sediment	0.305 mg/kg dry weight	EUSES	0.0377
marine water	0.000752 mg/L	EUSES	0.028
marine sediment	0.039 mg/kg dry weight	EUSES	0.028
Air	< 1E-07 mg/m³	EUSES	< 1E-06
soil	0.371 mg/kg dry weight	EUSES	0.0106
Sewage treatment plant	0.0304 mg/L	EUSES	0.00887

1.3. CS2: Worker Contributing Scenario: Industrial (PROC5, PROC1, PROC2, PROC3, PROC4, PROC7, PROC8a, PROC8b, PROC9, PROC10, PROC13)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, systemic, long-term	0.0801 mg/m³	ECETOC TRA worker v3	0.0688

1.4 Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Guidance to check compliance with the exposure scenario:

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

2. ES 2 Widespread use by professional workers; Various products (PC3, PC39, PC24, PC35)

2.1 TITLE SECTION

Exposure Scenario name	Cleaning agent
Date - Version	20/08/2019 - 1.0
Life Cycle Stage	Widespread use by professional workers
Main user group	Professional uses
Sector(s) of use	Professional uses (SU22)
Product Categories	Air care products (PC3) - Cosmetics, personal care products (PC39) - Lubricants, greases, release products (PC24) - Washing and cleaning products (PC35)

Environment Contributing Scenario

CS1 Covered by	ERC8a

Worker Contributing Scenario

CS2 General use from professional operators	PROC5 - PROC1 - PROC2 - PROC3 - PROC4 - PROC8a - PROC8b - PROC9 - PROC10 - PROC11 - PROC13 - PROC15 - PROC19

2.2 Conditions of use affecting exposure

2.2. CS1: Environment Contributing Scenario: Covered by (ERC8a)

Environmental release categories	Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor) (ERC8a)

Product (article) characteristics

Concentration of substance in product:
Covers percentage substance in the product up to 25 %.

Amount used, frequency and duration of use (or from service life)

Amounts used:
Daily amount per site 0.014 t

Maximum allowable site tonnage (MSafe): 19 kg

Release type: Continuous release

Emission days: 365 days per year

Conditions and measures related to treatment of waste (including article waste)

Waste treatment
External treatment and disposal of waste should comply with applicable local and/or national regulations.

Other conditions affecting environmental exposure

Local marine water dilution factor: 100
Local freshwater dilution factor: 10

2.2. CS2: Worker Contributing Scenario: General use from professional operators (PROC5, PROC1, PROC2, PROC3, PROC4, PROC8a, PROC8b, PROC9, PROC10, PROC11, PROC13, PROC15, PROC19)

Process Categories	Mixing or blending in batch processes - Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions - Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions - Manufacture or formulation

	in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition - Chemical production where opportunity for exposure arises - Transfer of substance or mixture (charging and discharging) at non-dedicated facilities - Transfer of substance or mixture (charging and discharging) at dedicated facilities - Transfer of substance or mixture into small containers (dedicated filling line, including weighing) - Roller application or brushing - Non industrial spraying - Treatment of articles by dipping and pouring - Use as laboratory reagent - Manual activities involving hand contact (PROC5, PROC1, PROC2, PROC3, PROC4, PROC8a, PROC8b, PROC9, PROC10, PROC11, PROC13, PROC15, PROC19)

Product (article) characteristics

Physical form of product:

Liquid

Vapour pressure:

< 1E-06 hPa

Concentration of substance in product:

Covers percentage substance in the product up to 25 %.

Technical and organisational conditions and measures

Technical and organisational measures

Remove spills immediately

Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed.

Conditions and measures related to personal protection, hygiene and health evaluation

Personal protection

Wear suitable gloves tested to EN374.

Wear an impervious suit.

Use eye protection according to EN 166.

Other conditions affecting worker exposure

Indoor use

Additional good practice advice. Obligations according to Article 37(4) of REACH do not apply.

Additional Good Practice Advice:

Ensure regular inspection, cleaning and maintenance of equipment and machines. Ensure control measures are regularly inspected and maintained.

2.3 Exposure estimation and reference to its source

2.3. CS1: Environment Contributing Scenario: Covered by (ERC8a)

Release route	Release rate	Release estimation method
Air	0 %	N/A
Water	99 %	N/A
soil	1 %	N/A

protection target	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
freshwater	0.024 mg/L	EUSES	0.0894
Air	< 1E-07 mg/m³	EUSES	< 1E-06
marine water	0.0024 mg/L	EUSES	0.0898

marine sediment	0.608 mg/kg dry weight	EUSES	0.0898
freshwater sediment	6.08 mg/kg dry weight	EUSES	0.75
soil	0.187 mg/kg dry weight	EUSES	0.00534
Sewage treatment plant	0.007 mg/L	EUSES	0.00204

2.3. CS2: Worker Contributing Scenario: General use from professional operators (PROC5, PROC1, PROC2, PROC3, PROC4, PROC8a, PROC8b, PROC9, PROC10, PROC11, PROC13, PROC15, PROC19)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, systemic, long-term	0.0801 mg/m³	ECETOC TRA worker v3	0.0688

2.4 Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Guidance to check compliance with the exposure scenario:

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

3. ES 3 Consumer use; Washing and cleaning products (PC35)

3.1 TITLE SECTION

Exposure Scenario name	Cleaning agent
Date - Version	20/08/2019 - 1.0
Life Cycle Stage	Consumer use
Main user group	Consumer uses
Sector(s) of use	Consumer uses (SU21)
Product Categories	Washing and cleaning products (PC35)

Environment Contributing Scenario	
CS1 Covered by	ERC8a
Consumer Contributing Scenario	
CS2 Consumer	PC35 - PC35_1, PC8_1
CS3 Consumer	PC35 - PC8_2, PC35_2
CS4 Consumer	PC35 - PC8_3, PC35_3
CS5 Consumer	PC35
CS6 Consumer	PC35
CS7 Consumer	PC35
CS8 Consumer	PC35
CS9 Consumer	PC35
CS10 Consumer	PC35
CS11 Consumer	PC35
CS12 Consumer	PC35

3.2 Conditions of use affecting exposure

3.2. CS1: Environment Contributing Scenario: Covered by (ERC8a)

Environmental release categories	Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor) (ERC8a)

Amount used, frequency and duration of use (or from service life)

Amounts used:

Daily amount per site 0.239 t

Maximum allowable site tonnage (MSafe): 217 kg

Release type: Continuous release

Emission days: 365 days per year

Conditions and measures related to treatment of waste (including article waste)

Waste treatment

External treatment and disposal of waste should comply with applicable local and/or national regulations.

Other conditions affecting environmental exposure

Local marine water dilution factor: 100
Local freshwater dilution factor: 10

3.2. CS2: Consumer Contributing Scenario: Consumer (PC35)

Product Categories	Washing and cleaning products (PC35)
Product (Sub-)Categories	Laundry and dish washing products (PC35_1, PC8_1)

Product (article) characteristics

Physical form of product:
Liquid mixture

Concentration of substance in product:
Covers percentage substance in the product up to 1 %.

Amount used, frequency and duration of use/exposure

Amounts used:
Amount per use 19 g

Frequency:
Covers use up to 104 times per year

3.2. CS3: Consumer Contributing Scenario: Consumer (PC35)

Product Categories	Washing and cleaning products (PC35)
Product (Sub-)Categories	Cleaners, liquids (all purpose cleaners, sanitary products, floor cleaners, glass cleaners, carpet cleaners, metal cleaners) (PC8_2, PC35_2)

Product (article) characteristics

Physical form of product:
Liquid mixture

Concentration of substance in product:
Covers concentrations up to 14 %

Amount used, frequency and duration of use/exposure

Amounts used:
Amount per use 0.65 g

Frequency:
Covers use up to 128 times per year

3.2. CS4: Consumer Contributing Scenario: Consumer (PC35)

Product Categories	Washing and cleaning products (PC35)
Product (Sub-)Categories	Cleaners, trigger sprays (all purpose cleaners, sanitary products, glass cleaners) (PC8_3, PC35_3)

Product (article) characteristics

Physical form of product:
Liquid mixture

Concentration of substance in product:
Covers concentrations up to 6.54E-05 %

Amount used, frequency and duration of use/exposure

Amounts used:
Amount per use 0.00015 g

Duration:
Exposure duration 60 min

Frequency:

Covers use up to 426 times per year

Other conditions affecting consumers exposure

Indoor use
Room size: Covers use in room size of 15 m³
Ventilation rate: 2.5 Air changer per hour

Additional conditions human health
Covers skin contact area up to 1900 cm²

3.2. CS5: Consumer Contributing Scenario: Consumer (PC35)

Product Categories	Washing and cleaning products (PC35)

Product (article) characteristics

Physical form of product:
Liquid mixture

Concentration of substance in product:
Covers concentrations up to 0.23 %

Amount used, frequency and duration of use/exposure

Frequency:
Covers use up to 365 times per year

Other conditions affecting consumers exposure

Additional conditions human health
Covers skin contact area up to 17600 cm²

3.2. CS6: Consumer Contributing Scenario: Consumer (PC35)

Product Categories	Washing and cleaning products (PC35)

Product (article) characteristics

Physical form of product:
Liquid mixture

Concentration of substance in product:
Covers concentrations up to 6 %

Amount used, frequency and duration of use/exposure

Duration:
Exposure duration 60 min
Frequency:
Covers use up to 365 times per year

Other conditions affecting consumers exposure

Indoor use
Room size: Covers use in room size of 15 m³
Ventilation rate: 2.5 Air changer per hour

Additional conditions human health
Covers skin contact area up to 1900 cm²

3.2. CS7: Consumer Contributing Scenario: Consumer (PC35)

Product Categories	Washing and cleaning products (PC35)

Product (article) characteristics

Physical form of product:
Liquid mixture

Concentration of substance in product:

Covers concentrations up to 30 %

Amount used, frequency and duration of use/exposure

Amounts used:

Amount per use 0.00042 g

Duration:

Exposure duration 60 min

Frequency:

Covers use up to 365 times per year

3.2. CS8: Consumer Contributing Scenario: Consumer (PC35)

Product Categories	Washing and cleaning products (PC35)

Product (article) characteristics

Physical form of product:

Liquid mixture

Concentration of substance in product:

Covers concentrations up to 14 %

Amount used, frequency and duration of use/exposure

Duration:

Exposure duration 10 min

Frequency:

Covers use up to 128 times per year

Other conditions affecting consumers exposure

Indoor use

Room size: Covers use in room size of 15 m³

Ventilation rate: 2 Air changer per hour

Additional conditions human health

Covers skin contact area up to 840 cm²

3.2. CS9: Consumer Contributing Scenario: Consumer (PC35)

Product Categories	Washing and cleaning products (PC35)

Product (article) characteristics

Physical form of product:

Liquid mixture

Concentration of substance in product:

Covers concentrations up to 14 %

Amount used, frequency and duration of use/exposure

Amounts used:

Amount per use 0.65 g

Frequency:

Covers use up to 128 times per year

Other conditions affecting consumers exposure

Additional conditions human health

Covers skin contact area up to 840 cm²

3.2. CS10: Consumer Contributing Scenario: Consumer (PC35)

Product Categories	Washing and cleaning products (PC35)

Product (article) characteristics

Physical form of product:
Liquid mixture

Concentration of substance in product:
Covers concentrations up to 10 %

Amount used, frequency and duration of use/exposure

Amounts used:
Amount per use 0.2 g

Duration:
Exposure duration 60 min

Frequency:
Covers use up to 26 times per year

Other conditions affecting consumers exposure

Indoor use
Room size: Covers use in room size of 15 m³
Ventilation rate: 2.5 Air changer per hour

Additional conditions human health
Covers skin contact area up to 430 cm²

3.2. CS11: Consumer Contributing Scenario: Consumer (PC35)

Product Categories	Washing and cleaning products (PC35)

Product (article) characteristics

Physical form of product:
Liquid mixture

Concentration of substance in product:
Covers concentrations up to 2.2 %

Amount used, frequency and duration of use/exposure

Amounts used:
Amount per use 260 g

Duration:
Exposure duration 25 min

Frequency:
Covers use up to 4 times per year

Other conditions affecting consumers exposure

Indoor use
Room size: Covers use in room size of 10 m³
Ventilation rate: 2 Air changer per hour

Additional conditions human health
Covers skin contact area up to 19000 cm²

3.2. CS12: Consumer Contributing Scenario: Consumer (PC35)

Product Categories	Washing and cleaning products (PC35)

Product (article) characteristics

Physical form of product:
Liquid mixture

Concentration of substance in product:
Covers concentrations up to 5 %

Amount used, frequency and duration of use/exposure

Amounts used:

Amount per use 880 g

Duration:

Exposure duration 240 min

Frequency:

Covers use up to 104 times per year

Other conditions affecting consumers exposure

Indoor use

Room size: Covers use in room size of 58 m³

Ventilation rate: 0.5 Air changer per hour

Additional conditions human health

Covers skin contact area up to 19000 cm²

3.3 Exposure estimation and reference to its source

3.3. CS1: Environment Contributing Scenario: Covered by (ERC8a)

Release route	Release rate	Release estimation method
Air	0 %	N/A
Water	99 %	N/A
soil	1 %	N/A

protection target	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
freshwater	0.035 mg/L	EUSES	0.131
freshwater sediment	0.035 mg/kg dry weight	N/A	0.654
marine water	0.0035 mg/L	EUSES	0.131
marine sediment	0.53 mg/kg dry weight	N/A	0.0779
Air	< 1E-07 mg/m³	EUSES	< 1E-06
soil	3.16 mg/kg dry weight	EUSES	0.0902
Sewage treatment plant	0.197 mg/L	N/A	0.0574

3.2. CS2: Consumer Contributing Scenario: Consumer (PC35)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
dermal, systemic, long-term	0.832 mg/kg bw/day	Consexpo v4.1	0.00979

3.2. CS3: Consumer Contributing Scenario: Consumer (PC35)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)

dermal, systemic, long-term	0.491 mg/kg bw/day	Consexpo v4.1	0.00578

3.2. CS4: Consumer Contributing Scenario: Consumer (PC35)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
dermal, systemic, long-term	0.176 mg/kg bw/day	Consexpo v4.1	0.00207
inhalative, systemic, long-term	< 1E-06 mg/m³	Consexpo v4.1	< 1E-06

3.2. CS5: Consumer Contributing Scenario: Consumer (PC35)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
dermal, systemic, long-term	28.3 mg/kg bw/day	Consexpo v4.1	0.333

3.2. CS6: Consumer Contributing Scenario: Consumer (PC35)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
dermal, systemic, long-term	0.0378 mg/kg bw/day	Consexpo v4.1	0.000445
inhalative, systemic, long-term	1.31E-05 mg/m³	Consexpo v4.1	4E-06

3.2. CS7: Consumer Contributing Scenario: Consumer (PC35)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
oral, systemic, long-term	0.00194 mg/kg bw/day	Consexpo v4.1	0.00228

3.2. CS8: Consumer Contributing Scenario: Consumer (PC35)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
dermal, systemic, long-term	0.00174 mg/kg bw/day	Consexpo v4.1	2.1E-05
inhalative, systemic, long-term	1.31E-05 mg/kg bw/day	Consexpo v4.1	4E-06

3.2. CS9: Consumer Contributing Scenario: Consumer (PC35)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
dermal, systemic, long-term	0.491 mg/kg bw/day	Consexpo v4.1	0.00578

3.2. CS10: Consumer Contributing Scenario: Consumer (PC35)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
dermal, systemic, long-term	0.0219 mg/kg bw/day	Consexpo v4.1	0.000258
inhalative, systemic, long-term	1.9E-05 mg/m³	Consexpo v4.1	< 1E-06

3.2. CS11: Consumer Contributing Scenario: Consumer (PC35)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
dermal, systemic, long-term	0.0704 mg/kg bw/day	Consexpo v4.1	0.000828
inhalative, systemic, long-term	< 1E-06 mg/m³	Consexpo v4.1	< 1E-06

3.2. CS12: Consumer Contributing Scenario: Consumer (PC35)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
dermal, systemic, long-term	4.16 mg/kg bw/day	Consexpo v4.1	0.0489
inhalative, systemic, long-term	< 1E-06 mg/m³	Consexpo v4.1	< 1E-06

3.4 Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Guidance to check compliance with the exposure scenario:

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

Exposure Scenario, 08/02/2024

Substance identity	
Chemical name	Alcohols, C12-14, ethoxylated, sulfates, sodium salts 1-2,5 moles ethoxylated
CAS No.	68891-38-3
EINECS No.	500-234-8

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1. ES 1 Use at industrial site

1.1 TITLE SECTION

Exposure Scenario name	Car care and maintenance products
Date - Version	08/02/2024 - 2.0
Life Cycle Stage	Use at industrial site
Main user group	Industrial uses
Sector(s) of use	Industrial uses (SU3)

Environment Contributing Scenario	
CS1 Covered by	ERC4
Worker Contributing Scenario	
CS2 Industrial	PROC10
CS3 Industrial	PROC8a
CS4 Industrial	PROC4
CS5 Industrial	PROC7

1.2 Conditions of use affecting exposure

1.2. CS1: Environment Contributing Scenario: Covered by (ERC4)

Environmental release categories	Use of non-reactive processing aid at industrial site (no inclusion into or onto article) (ERC4)

Amount used, frequency and duration of use (or from service life)

Amounts used:

Annual site tonnage 10 t(onnes)/year

Release type: Continuous release

Emission days: 20 days per year

Conditions and measures related to sewage treatment plant

STP type:

Municipal Sewage Treatment Plant

STP effluent (m^3/day): 18000

Conditions and measures related to treatment of waste (including article waste)

Waste treatment

External treatment and disposal of waste should comply with applicable local and/or national regulations.

Other conditions affecting environmental exposure

Local marine water dilution factor: 100

Local freshwater dilution factor: 10

Receiving surface water flow: 2000 m³/h

1.2. CS2: Worker Contributing Scenario: Industrial (PROC10)

Process Categories	Roller application or brushing (PROC10)

Product (article) characteristics

Physical form of product:

Liquid

Concentration of substance in product:

Covers percentage substance in the product up to 25 %.

Amount used, frequency and duration of use/exposure

Duration:

Application duration > 4 h

Frequency:

Covers use up to 5 days per week

Other conditions affecting worker exposure

Indoor use
Industrial use

Additional conditions human health

Covers skin contact area up to 960 cm²

1.2. CS3: Worker Contributing Scenario: Industrial (PROC8a)

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

Product (article) characteristics

Physical form of product:

Liquid

Concentration of substance in product:

Covers percentage substance in the product up to 25 %.

Amount used, frequency and duration of use/exposure

Duration:

Application duration > 4 h

Frequency:

Covers use up to 5 days per week

Other conditions affecting worker exposure

Indoor use
Industrial use

Additional conditions human health

Covers skin contact area up to 960 cm²

1.2. CS4: Worker Contributing Scenario: Industrial (PROC4)

Process Categories	Chemical production where opportunity for exposure arises (PROC4)

Product (article) characteristics

Physical form of product:

Liquid

Concentration of substance in product:

Covers percentage substance in the product up to 25 %.

Amount used, frequency and duration of use/exposure

Duration:

Application duration > 4 h

Frequency:

Covers use up to 5 days per week

Other conditions affecting worker exposure

Indoor use
Industrial use

Additional conditions human health

Covers skin contact area up to 480 cm²

1.2. CS5: Worker Contributing Scenario: Industrial (PROC7)

Process Categories	Industrial spraying (PROC7)

Product (article) characteristics

Physical form of product:

Liquid

Concentration of substance in product:

Covers percentage substance in the product up to 5 %.

Amount used, frequency and duration of use/exposure

Duration:

Application duration <= 4 h

Frequency:

Covers use up to 5 days per week

Other conditions affecting worker exposure

Indoor use
Industrial use
Ventilation rate: 30 %

Additional conditions human health
Covers skin contact area up to 1500 cm²

1.3 Exposure estimation and reference to its source

1.3. CS1: Environment Contributing Scenario: Covered by (ERC4)

Release route	Release rate	Release estimation method
Water	2 %	N/A
Air	0 %	N/A
soil	5 %	N/A

protection target	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
freshwater	0.116945 mg/L	N/A	0.487272
freshwater sediment	0.486471 mg/kg dry weight	N/A	0.089261
marine water	0.011676 mg/L	N/A	0.486485
marine sediment	0.048569 mg/kg dry weight	N/A	0.089117
soil	0.112922	N/A	0.015056
Sewage treatment plant	0.0632612 mg/L	N/A	7.9E-06

1.3. CS2: Worker Contributing Scenario: Industrial (PROC10)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
dermal, systemic, long-term	27.429 mg/kg bw/day	N/A	0.009974
inhalative, systemic, long-term	147.917 mg/m³	N/A	0.845238

combined routes	48.56 mg/kg bw/day	N/A	0.855212

1.3. CS3: Worker Contributing Scenario: Industrial (PROC8a)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
dermal, systemic, long-term	13.714 mg/kg bw/day	N/A	0.004987
inhalative, systemic, long-term	1.479 mg/m³	N/A	0.008452
combined routes	13.926 mg/kg bw/day	N/A	0.013439

1.3. CS4: Worker Contributing Scenario: Industrial (PROC4)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
dermal, systemic, long-term	8.571 mg/kg bw/day	N/A	0.003117
inhalative, systemic, long-term	124.25 mg/m³	N/A	0.71
combined routes	26.321 mg/kg bw/day	N/A	0.713117

1.3. CS5: Worker Contributing Scenario: Industrial (PROC7)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
dermal, systemic, long-term	8.571 mg/kg bw/day	N/A	0.003117
inhalative, systemic, long-term	124.25 mg/m³	N/A	0.71
combined routes	26.321 mg/kg bw/day	N/A	0.713117

1.4 Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Guidance to check compliance with the exposure scenario:

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

2. ES 2 Widespread use by professional workers

2.1 TITLE SECTION

Exposure Scenario name	Car care and maintenance products
Date - Version	08/02/2024 - 1.0
Life Cycle Stage	Widespread use by professional workers
Main user group	Professional uses
Sector(s) of use	Professional uses (SU22)

Environment Contributing Scenario

CS1 Covered by	ERC8a

Worker Contributing Scenario

CS2 Covered by	PROC8a
CS3 Covered by	PROC4
CS4 Covered by	PROC10
CS5 Covered by	PROC11
CS6 Covered by	PROC11

2.2 Conditions of use affecting exposure

2.2. CS1: Environment Contributing Scenario: Covered by (ERC8a)

Environmental release categories	Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor) (ERC8a)

Amount used, frequency and duration of use (or from service life)

Amounts used:

Annual site tonnage 300 t(onnes)/year
Daily amount per site 1644 kg/day

Release type: Continuous release

Emission days: 365 days per year

Technical and organisational conditions and measures

Control measures to prevent releases

	Air - minimum efficiency of: 100 % Water - minimum efficiency of: 100 %

Other conditions affecting environmental exposure

Local marine water dilution factor: 100

Local freshwater dilution factor: 10

2.2. CS2: Worker Contributing Scenario: Covered by (PROC8a)

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

Product (article) characteristics

Physical form of product:

Liquid

Concentration of substance in product:

Covers percentage substance in the product up to 25 %.

Amount used, frequency and duration of use/exposure

Duration:

Covers use up to > 4 h

Frequency:

Use frequency 5 days per week

Other conditions affecting worker exposure

Indoor use
Professional use

Additional conditions human health

Covers skin contact area up to 960 cm^2

2.2. CS3: Worker Contributing Scenario: Covered by (PROC4)

Process Categories	Chemical production where opportunity for exposure arises (PROC4)

Product (article) characteristics

Physical form of product:

Liquid

Concentration of substance in product:

Covers percentage substance in the product up to 25 %.

Amount used, frequency and duration of use/exposure

Duration:

Covers use up to > 4 h

Frequency:

Use frequency 5 days per week

Other conditions affecting worker exposure

Indoor use
Professional use

Additional conditions human health

Covers skin contact area up to 480 cm²

2.2. CS4: Worker Contributing Scenario: Covered by (PROC10)

Process Categories	Roller application or brushing (PROC10)

Product (article) characteristics

Physical form of product:

Liquid

Concentration of substance in product:

Covers concentrations up to 5 %

Amount used, frequency and duration of use/exposure

Duration:

Covers use up to > 4 h

Frequency:

Use frequency 5 days per week

Other conditions affecting worker exposure

Indoor use
Professional use

Additional conditions human health

Covers skin contact area up to 960 cm²

2.2. CS5: Worker Contributing Scenario: Covered by (PROC11)

Process Categories	Non industrial spraying (PROC11)

Product (article) characteristics

Physical form of product:

Liquid

Concentration of substance in product:

Covers concentrations up to 5 %

Amount used, frequency and duration of use/exposure

Duration:

Covers use up to > 4 h

Frequency:

Use frequency 5 days per week

Other conditions affecting worker exposure

Indoor use
Professional use
Ventilation rate: 30 %

Additional conditions human health
Covers skin contact area up to 1500 cm²

2.2. CS6: Worker Contributing Scenario: Covered by (PROC11)

Process Categories	Non industrial spraying (PROC11)

Product (article) characteristics

Physical form of product:

Liquid

Concentration of substance in product:

Covers concentrations up to 5 %

Amount used, frequency and duration of use/exposure

Duration:

Covers use up to > 4 h

Frequency:

Use frequency 5 days per week

Other conditions affecting worker exposure

Indoor use
Professional use
Ventilation rate: 30 %

Additional conditions human health
Covers skin contact area up to 1500 cm²

2.3 Exposure estimation and reference to its source

2.3. CS1: Environment Contributing Scenario: Covered by (ERC8a)

protection target	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
freshwater	0.064084 mg/L	N/A	0.267015
freshwater sediment	0.266576 mg/kg dry weight	N/A	0.048913

marine water	0.006389 mg/L	N/A	0.266228
marine sediment	0.026579 mg/kg dry weight	N/A	0.048769
soil	0.106749 mg/kg dry weight	N/A	0.014233
Sewage treatment plant	0.103991 mg/L	N/A	1E-05

2.3. CS2: Worker Contributing Scenario: Covered by (PROC8a)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
dermal, systemic, long-term	13.714 mg/kg dry weight	N/A	0.004987
inhalative, systemic, long-term	1.479 mg/m³	N/A	0.008452
combined routes	13.926 mg/kg dry weight	N/A	0.013439

2.3. CS3: Worker Contributing Scenario: Covered by (PROC4)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
dermal, systemic, long-term	6.857 mg/kg dry weight	N/A	0.002494
inhalative, systemic, long-term	1.479 mg/m³	N/A	0.008452
combined routes	7.068 mg/kg dry weight	N/A	0.010946

2.3. CS4: Worker Contributing Scenario: Covered by (PROC10)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
dermal, systemic, long-term	5.486 mg/kg dry weight	N/A	0.001995
inhalative, systemic, long-term	73.958 mg/m³	N/A	0.422619
combined routes	16.051 mg/kg dry weight	N/A	0.424614

2.3. CS5: Worker Contributing Scenario: Covered by (PROC11)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
dermal, systemic, long-term	21.429 mg/kg dry weight	N/A	0.007792

inhalative, systemic, long-term	59.167 mg/m³	N/A	0.338095
combined routes	29.881 mg/kg dry weight	N/A	0.345887

2.3. CS6: Worker Contributing Scenario: Covered by (PROC11)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
dermal, systemic, long-term	21.429 mg/kg dry weight	N/A	0.007792
inhalative, systemic, long-term	124.25 mg/m³	N/A	0.71
combined routes	39.179 mg/kg dry weight	N/A	0.717792

2.4 Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Guidance to check compliance with the exposure scenario:

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

3. ES 3 Widespread use by professional workers

3.1 TITLE SECTION

Exposure Scenario name	Professional use of dishwash products
Date - Version	08/02/2024 - 3.0
Life Cycle Stage	Widespread use by professional workers
Main user group	Professional uses
Sector(s) of use	Professional uses (SU22)

Environment Contributing Scenario	
CS1 Covered by	ERC8a
Worker Contributing Scenario	
CS2 General use from professional operators	PROC8b
CS3 General use from professional operators	PROC1
CS4 General use from professional operators	PROC8a
CS5 General use from professional operators	PROC2
CS6 General use from professional operators	PROC10
CS7 General use from professional operators	PROC10

3.2 Conditions of use affecting exposure

3.2. CS1: Environment Contributing Scenario: Covered by (ERC8a)

Environmental release categories	Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor) (ERC8a)

Amount used, frequency and duration of use (or from service life)

Amounts used:

Daily amount per site 300 t(onnes)/year
Daily amount per site 1644 kg/day

Release type: Continuous release

Emission days: 365 days per year

Conditions and measures related to sewage treatment plant

STP type:

Municipal Sewage Treatment Plant

STP effluent (m^3/day): 18000

Conditions and measures related to treatment of waste (including article waste)

Waste treatment

External treatment and disposal of waste should comply with applicable local and/or national regulations.

Other conditions affecting environmental exposure

Local marine water dilution factor: 100

Local freshwater dilution factor: 10

Receiving surface water flow: 2000 m³/day

3.2. CS2: Worker Contributing Scenario: General use from professional operators (PROC8b)

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

Product (article) characteristics

Concentration of substance in product:

Covers percentage substance in the product up to 25 %.

Amount used, frequency and duration of use/exposure

Duration:

Application duration > 4 h

Frequency:

Covers frequency up to: 5 days per week

Other conditions affecting worker exposure

Indoor use

Professional use

Additional conditions human health

Covers skin contact area up to 960 cm²

3.2. CS3: Worker Contributing Scenario: General use from professional operators (PROC1)

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

Product (article) characteristics

Concentration of substance in product:

Covers percentage substance in the product up to 25 %.

Amount used, frequency and duration of use/exposure

Duration:

Application duration > 4 h

Frequency:

Covers frequency up to: 5 days per week

Other conditions affecting worker exposure

Indoor use

Professional use

Additional conditions human health

Covers skin contact area up to 240 cm²

3.2. CS4: Worker Contributing Scenario: General use from professional operators (PROC8a)

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

Product (article) characteristics

Concentration of substance in product:

Covers percentage substance in the product up to 25 %.

Amount used, frequency and duration of use/exposure

Duration:

Application duration > 4 h

Frequency:

Covers frequency up to: 5 days per week

Other conditions affecting worker exposure

Indoor use

Professional use

Additional conditions human health

Covers skin contact area up to 960 cm²

3.2. CS5: Worker Contributing Scenario: General use from professional operators (PROC2)

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

Product (article) characteristics

Concentration of substance in product:

Covers percentage substance in the product up to 25 %.

Amount used, frequency and duration of use/exposure

Duration:

Application duration > 4 h

Frequency:

Covers frequency up to: 5 days per week

Other conditions affecting worker exposure

Indoor use

Professional use

Additional conditions human health

Covers skin contact area up to 480 cm²

3.2. CS6: Worker Contributing Scenario: General use from professional operators (PROC10)

Process Categories	Roller application or brushing (PROC10)

Product (article) characteristics

Concentration of substance in product:

Covers percentage substance in the product up to 25 %.

Amount used, frequency and duration of use/exposure

Duration:

Application duration <= 4 h

Frequency:

Covers frequency up to: 5 days per week

Other conditions affecting worker exposure

Indoor use
Professional use

Additional conditions human health

Covers skin contact area up to 960 cm²

3.2. CS7: Worker Contributing Scenario: General use from professional operators (PROC10)

Process Categories	Roller application or brushing (PROC10)

Product (article) characteristics

Physical form of product:

Liquid

Concentration of substance in product:

Covers percentage substance in the product up to 25 %.

Amount used, frequency and duration of use/exposure

Duration:

Exposure duration 15 min/h

Frequency:

Covers frequency up to: 5 days per week

Other conditions affecting worker exposure

Indoor use
Professional use

Additional conditions human health

Covers skin contact area up to 960 cm²

3.3 Exposure estimation and reference to its source

3.3. CS1: Environment Contributing Scenario: Covered by (ERC8a)

Release route	Release rate	Release estimation method
Water	100 %	N/A
Air	100 %	N/A
soil	0 %	N/A

protection target	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
freshwater	0.064084 mg/L	N/A	6.156
freshwater sediment	mg/kg dry weight	N/A	33.607
marine water	0.006389 mg/L	N/A	6.175
marine sediment	0.026579	N/A	33.707
soil	0.106749 mg/kg dry weight	N/A	0.014233
Sewage treatment plant	0.103991 mg/L	N/A	1E-05

3.3. CS2: Worker Contributing Scenario: General use from professional operators (PROC8b)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
dermal, systemic, long-term	13.714 mg/kg bw/day	N/A	0.004987
inhalative, systemic, long-term	1.479 mg/m³	N/A	0.008452
combined routes	13.926 mg/kg bw/day	N/A	0.013439

3.3. CS3: Worker Contributing Scenario: General use from professional operators (PROC1)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
dermal, systemic, long-term	0.034286 mg/kg bw/day	N/A	1.2E-05
inhalative, systemic, long-term	0.147917 mg/m³	N/A	0.000845
combined routes	0.055417 mg/kg bw/day	N/A	0.000858

3.3. CS4: Worker Contributing Scenario: General use from professional operators (PROC8a)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
dermal, systemic, long-term	13.714 mg/kg bw/day	N/A	0.004987
inhalative, systemic, long-term	1.479 mg/m³	N/A	0.008452
combined routes	13.926 mg/kg bw/day	N/A	0.013439

3.3. CS5: Worker Contributing Scenario: General use from professional operators (PROC2)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
dermal, systemic, long-term	1.371 mg/kg bw/day	N/A	0.000499
inhalative, systemic, long-term	1.479 mg/m³	N/A	0.008452
combined routes	1.583 mg/kg bw/day	N/A	0.008951

3.3. CS6: Worker Contributing Scenario: General use from professional operators (PROC10)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
dermal, systemic, long-term	16.457 mg/kg bw/day	N/A	0.005984
inhalative, systemic, long-term	133.125 mg/m³	N/A	0.760714
combined routes	35.475 mg/kg bw/day	N/A	0.766699

3.3. CS7: Worker Contributing Scenario: General use from professional operators (PROC10)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
dermal, systemic, long-term	16.457 mg/kg bw/day	N/A	0.005984
inhalative, systemic, long-term	44.375 mg/m³	N/A	0.253571
combined routes	22.796 mg/kg bw/day	N/A	0.259556

3.4 Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Guidance to check compliance with the exposure scenario:

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

4. ES 4 Consumer use; Washing and cleaning products (PC35)

4.1 TITLE SECTION

Exposure Scenario name	Cleaning agent
Date - Version	08/02/2024 - 2.0
Life Cycle Stage	Consumer use
Main user group	Consumer uses
Sector(s) of use	Consumer uses (SU21)
Product Categories	Washing and cleaning products (PC35)

Environment Contributing Scenario

CS1 Covered by	ERC8a

Consumer Contributing Scenario

CS2 Consumer	PC35
CS3 Consumer	PC35
CS4 Consumer	PC35

4.2 Conditions of use affecting exposure

4.2. CS1: Environment Contributing Scenario: Covered by (ERC8a)

Environmental release categories	Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor) (ERC8a)

Amount used, frequency and duration of use (or from service life)

Amounts used:

Daily amount per site 1644 kg/day

Release type: Continuous release

Emission days: 365 days per year

Conditions and measures related to treatment of waste (including article waste)

Waste treatment

External treatment and disposal of waste should comply with applicable local and/or national regulations.

Other conditions affecting environmental exposure

Local marine water dilution factor: 100
Local freshwater dilution factor: 10
Receiving surface water flow: 18000 m^3/day

4.2. CS2: Consumer Contributing Scenario: Consumer (PC35)

Product Categories	Washing and cleaning products (PC35)

Product (article) characteristics

Physical form of product:

Liquid

Concentration of substance in product:

Covers concentrations up to 50 %

Amount used, frequency and duration of use/exposure

Amounts used:

Amount per use 250 g

Duration:

Exposure duration 0.33 h

Frequency:

Covers use up to 1 uses per day

Other conditions affecting consumers exposure

Room size: Covers use in room size of 20 m^3

Body parts exposed:

Assumes that potential dermal contact is limited to hands.

4.2. CS3: Consumer Contributing Scenario: Consumer (PC35)

Product Categories	Washing and cleaning products (PC35)

Product (article) characteristics

Physical form of product:

Liquid

Concentration of substance in product:

Covers concentrations up to 60 %

Amount used, frequency and duration of use/exposure

Amounts used:

Amount per use 50 g

Duration:

Exposure duration 1 h

Frequency:

Covers use up to 1 uses per day

Other conditions affecting consumers exposure

Room size: Covers use in room size of 20 m³

Body parts exposed:

Assumes that potential dermal contact is limited to hands.

4.2. CS4: Consumer Contributing Scenario: Consumer (PC35)

Product Categories	Washing and cleaning products (PC35)

Product (article) characteristics

Physical form of product:

Liquid

Concentration of substance in product:

Covers concentrations up to 10 %

Amount used, frequency and duration of use/exposure

Amounts used:

Amount per use 35 g

Duration:

Exposure duration 4 h

Frequency:

Covers use up to 1 uses per day

Other conditions affecting consumers exposure

Room size: Covers use in room size of 20 m³

Body parts exposed:

Assumes that potential dermal contact is limited to hands.

4.3 Exposure estimation and reference to its source

4.3. CS1: Environment Contributing Scenario: Covered by (ERC8a)

Release route	Release rate	Release estimation method

Air	100 %	N/A
Water	100 %	N/A
soil	0 %	N/A

protection target	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
freshwater	0.064084 mg/L	N/A	0.267015
freshwater sediment	0.266576 mg/kg dry weight	N/A	0.048913
marine water	0.006389 mg/L	N/A	0.266228
marine sediment	0.026579 mg/kg dry weight	N/A	0.048769
soil	0.106749 mg/kg dry weight	N/A	0.014233
Sewage treatment plant	0.103991 mg/L	N/A	1E-05

4.2. CS2: Consumer Contributing Scenario: Consumer (PC35)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
dermal, systemic, long-term	71458 mg/kg bw/day	ECETOC TRA consumer v3	0.043308
inhalative, systemic, long-term	0.001433 mg/m³	ECETOC TRA consumer v3	2.8E-05
combined routes	71.458 mg/kg bw/day	ECETOC TRA consumer v3	0.043336

4.2. CS3: Consumer Contributing Scenario: Consumer (PC35)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
dermal, systemic, long-term	85.75 mg/kg bw/day	ECETOC TRA consumer v3	0.05197
inhalative, systemic, long-term	0.001433 mg/m³	ECETOC TRA consumer v3	2.8E-05
combined routes	85.75 mg/kg bw/day	ECETOC TRA consumer v3	0.051997

4.2. CS4: Consumer Contributing Scenario: Consumer (PC35)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
dermal, systemic, long-term	14.292 mg/kg bw/day	ECETOC TRA consumer v3	0.008662
inhalative, systemic, long-term	51.471 mg/m³	ECETOC TRA consumer v3	0.989819
combined routes	18.996 mg/kg bw/day	ECETOC TRA consumer v3	0.998481

4.4 Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Guidance to check compliance with the exposure scenario:

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