



SAFETY DATA SHEET LAUNDRY DETERGENT BIO

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

1.1. Product identifier

Product name LAUNDRY DETERGENT BIO

Product number 62887

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

Identified uses Chemical

1.3. Details of the supplier of the safety data sheet

Supplier Univar Solutions UK Ltd
Aquarius House
6 Mid Point Business Park
Bradford
BD3 7AY
+44 1274 267300
+44 1274 267306
SDS.EMEA@univarsolutions.com

1.4. Emergency telephone number

Emergency telephone SGS - +32 (0)3 575 55 55 (24h)

Sds No. 62887

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Not Classified

Health hazards Skin Irrit. 2 - H315 Eye Dam. 1 - H318

Environmental hazards Not Classified

2.2. Label elements

Hazard pictograms



Signal word Danger

Hazard statements EUH208 Contains 1,2-BENZISOTHIAZOL-3(2H)-ONE. May produce an allergic reaction.
H315 Causes skin irritation.
H318 Causes serious eye damage.

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Precautionary statements

P264 Wash contaminated skin thoroughly after handling.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P302+P352 IF ON SKIN: Wash with plenty of water.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Contains

BENZENESULPHONIC ACID MONO C10 - 13 ALKYL DERSVIS SODIUM SALTS,
ALCOHOLS, C12-14, ETHOXYLATED, ALCOHOLS, C12-14, ETHOXYLATED, SULFATES,
SODIUM SALTS

2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.

SECTION 3: Composition/information on ingredients**3.2. Mixtures**

BENZENESULPHONIC ACID MONO C10 - 13 ALKYL DERVIS SODIUM SALTS			5-10%
CAS number: 68411-30-3	EC number: 270-115-0	REACH registration number: 01-2119489428-22-XXXX	
Classification Acute Tox. 4 - H302 Skin Irrit. 2 - H315 Eye Dam. 1 - H318 Aquatic Chronic 3 - H412			

ALCOHOLS, C12-14, ETHOXYLATED			5-10%
CAS number: 68439-50-9			
Classification Acute Tox. 4 - H302 Eye Dam. 1 - H318 Aquatic Chronic 3 - H412			

ALCOHOLS, C12-14, ETHOXYLATED, SULFATES, SODIUM SALTS			1-5%
CAS number: 68891-38-3	EC number: 500-234-8	REACH registration number: 01-2119488639-16-XXXX	
Classification Skin Irrit. 2 - H315 Eye Dam. 1 - H318 Aquatic Chronic 3 - H412			

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SUBTILISIN			<0.1%
CAS number: 9014-01-1	EC number: 232-752-2	REACH registration number: 01-2119480434-38-XXXX	
M factor (Acute) = 1			
Classification Acute Tox. 4 - H302 Skin Irrit. 2 - H315 Eye Dam. 1 - H318 Resp. Sens. 1 - H334 STOT SE 3 - H335 Aquatic Acute 1 - H400 Aquatic Chronic 2 - H411			

1,2-BENZISOTHIAZOL-3(2H)-ONE			<0.1%
CAS number: 2634-33-5	EC number: 220-120-9		
M factor (Acute) = 1			
Classification Acute Tox. 4 - H302 Skin Irrit. 2 - H315 Eye Dam. 1 - H318 Skin Sens. 1 - H317 Aquatic Acute 1 - H400 Aquatic Chronic 2 - H411			

The full text for all hazard statements is displayed in Section 16.

Composition comments The data shown are in accordance with the latest EC Directives.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation	Remove affected person from source of contamination. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Rinse nose and mouth with water. Get medical attention if any discomfort continues.
Ingestion	Do not induce vomiting. Rinse mouth thoroughly with water. Give plenty of water to drink. Get medical attention if any discomfort continues.
Skin contact	Remove affected person from source of contamination. Remove contaminated clothing. Wash skin thoroughly with soap and water. Get medical attention promptly if symptoms occur after washing.
Eye contact	Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention promptly if symptoms occur after washing.

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

Skin contact	Causes skin irritation. May cause an allergic skin reaction.
Eye contact	Causes serious eye damage.

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

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Notes for the doctor Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media The product is not flammable. Use fire-extinguishing media suitable for the surrounding fire.

Unsuitable extinguishing media Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products Oxides of carbon. Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

5.3. Advice for firefighters

Special protective equipment for firefighters Use protective equipment appropriate for surrounding materials.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Follow precautions for safe handling described in this safety data sheet. Avoid inhalation of vapours and contact with skin and eyes. Provide adequate ventilation.

6.2. Environmental precautions

Environmental precautions Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Absorb spillage with non-combustible, absorbent material. Collect and place in suitable waste disposal containers and seal securely. For waste disposal, see Section 13. Flush contaminated area with plenty of water.

6.4. Reference to other sections

Reference to other sections For personal protection, see Section 8.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Avoid spilling. Avoid contact with skin and eyes. Provide adequate ventilation.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Store in tightly-closed, original container in a dry, cool and well-ventilated place.

7.3. Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure controls/Personal protection

8.1. Control parameters

Occupational exposure limits

SUBTILISIN

Long-term exposure limit (8-hour TWA): WEL 0.00004 mg/m³

Sen

WEL = Workplace Exposure Limit.

Sen = Capable of causing occupational asthma.

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BENZENESULPHONIC ACID MONO C10 - 13 ALKYL DERIVS SODIUM SALTS (CAS: 68411-30-3)

DNEL Industry - Inhalation; Long term systemic effects: 7.6 mg/m³
 Industry - Dermal; Long term systemic effects: 119 mg/kg/day
 Consumer - Inhalation; Long term systemic effects: 1.3 mg/m³
 Consumer - Dermal; Long term systemic effects: 42.5 mg/kg/day
 Consumer - Oral; Long term systemic effects: 0.425 mg/kg/day

PNEC - Fresh water; 0.268 mg/l
 - marine water; 0.0268 mg/l
 - Intermittent release; 0.0167 mg/l
 - STP; 3.43 mg/l
 - Sediment (Freshwater); 8.1 mg/kg
 - Sediment (Marinewater); 6.8 mg/kg
 - Soil; 35 mg/kg

ALCOHOLS, C12-14, ETHOXYLATED (CAS: 68439-50-9)

Ingredient comments No exposure limits known for ingredient(s).

ALCOHOLS, C12-14, ETHOXYLATED, SULFATES, SODIUM SALTS (CAS: 68891-38-3)

DNEL Workers - Inhalation; Long term systemic effects: 175 mg/m³
 Workers - Dermal; Long term systemic effects: 2750 mg/kg/day
 General population, Consumer - Oral; Long term systemic effects: 15 mg/kg/day
 General population, Consumer - Inhalation; Long term systemic effects: 52 mg/m³
 General population, Consumer - Dermal; Long term systemic effects: 1650 mg/kg/day

PNEC - Fresh water; 0.24 mg/l
 - marine water; 0.024 mg/l
 - STP; 10000 mg/l
 - Sediment (Freshwater); 5.45 mg/kg
 - Sediment (Marinewater); 0.545 mg/kg
 - Soil; 0.946 mg/kg

TRIETHANOLAMINE (CAS: 102-71-6)

Ingredient comments No exposure limits known for ingredient(s).

DNEL Workers - Dermal; Long term systemic effects: 6.3 mg/kg
 Workers - Inhalation; Long term systemic effects: 5 mg/m³
 Workers - Inhalation; Long term local effects: 5 mg/m³
 Consumer - Oral; Long term systemic effects: 13 mg/kg
 Consumer - Dermal; Long term systemic effects: 3.1 mg/kg
 Consumer - Inhalation; Long term systemic effects: 1.25 mg/m³
 Consumer - Inhalation; Long term local effects: 1.25 mg/m³

PNEC - Fresh water; 0.32 mg/l
 - Intermittent release; 5.12 mg/l
 - Sediment (Freshwater); 1.7 mg/kg
 - marine water; 0.032 mg/l
 - Sediment (Marinewater); 0.17 mg/kg
 - STP; 10 mg/l
 - Soil; 0.151 mg/kg

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(L) HEXYL CINNAMAL (CAS: 101-86-0)

DNEL	Workers - Inhalation; Long term systemic effects: 0.078 mg/m ³
	Workers - Inhalation; Short term local effects: 6.28 mg/m ³
	Workers - Dermal; Long term systemic effects: 18.2 mg/kg
	Workers - Dermal; Long term local effects: 0.525 mg/cm ²
	Consumer - Inhalation; Long term systemic effects: 0.019 mg/m ³
	Consumer - Inhalation; Short term local effects: 4.71 mg/m ³
	Consumer - Dermal; Long term systemic effects: 9.11 mg/kg
	Consumer - Dermal; Long term local effects: 0.0787 mg/cm ²
	Consumer - Dermal; Short term local effects: 0.0787 mg/cm ²
	Consumer - Oral; Long term systemic effects: 0.056 mg/kg/day
PNEC	- Fresh water; 0.00126 mg/l
	- marine water; 0.000126 mg/l
	- STP; 10 mg/l
	- Sediment (Freshwater); 3.2 mg/kg
	- Sediment (Marinewater); 0.064 mg/kg
	- Soil; 9.51 mg/kg

SUBTILISIN (CAS: 9014-01-1)

DNEL	Workers - Dermal; Short term local effects: 0.2 %
DMEL	Workers - Inhalation; Long term local effects: 60 ng/m ³
	Professional, Consumer - Inhalation; Long term local effects: 15 ng/m ³
PNEC	- Fresh water; 0.06 µg/l
	- marine water; 0.006 µg/l
	- STP; 65000 µg/l

(L) BENZYL SALICYLATE (CAS: 118-58-1)

DNEL	Workers - Inhalation; Long term systemic effects: 3.17 mg/m ³
	Workers - Dermal; Long term systemic effects: 0.9 mg/kg/day
	General population - Inhalation; Long term systemic effects: 0.78 mg/m ³
	General population - Dermal; Long term systemic effects: 0.45 mg/kg/day
	General population - Oral; Long term systemic effects: 0.45 mg/kg/day
	Consumer - Oral; Long term systemic effects: 0.45 mg/kg/day
	Consumer - Dermal; Long term systemic effects: 0.45 mg/kg/day
	Consumer - Inhalation; Long term systemic effects: 0.78 mg/m ³
	Workers - Dermal; Long term systemic effects: 0.9 mg/kg/day
	Workers - Inhalation; Long term systemic effects: 3.17 mg/m ³
PNEC	Fresh water; 0.001 mg/l
	marine water; 0 mg/l
	STP; 10 mg/l
	Sediment (Freshwater); 0.583 mg/kg
	Sediment (Marinewater); 0.058 mg/kg
	Soil; 1.41 mg/kg

1-(1,2,3,4,5,6,7,8 OCTAHYDRO2,3,8,8-TETRAMETHYL-2-NAPHTHYL)ETHAN-1-ONE (CAS: 54464-57-2)

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DNEL

Workers - Inhalation; Long term systemic effects: 30 mg/m³
 Workers - Dermal; Long term systemic effects: 28.7 mg/kg/day
 Consumer - Inhalation; Long term systemic effects: 9 mg/m³
 Consumer - Dermal; Long term systemic effects: 17.2 mg/kg/day
 Consumer - Oral; Long term systemic effects: 3 mg/kg/day

PNEC

Fresh water; 2.8 µg/l
 marine water; 0.28 µg/l
 STP; 10 mg/l
 Sediment (Freshwater); 3.73 mg/kg
 Sediment (Marinewater); 0.75 mg/kg
 Soil; 2.7 mg/kg

HEXAMETHYLINDANOPYRAN (CAS: 1222-05-5)

DNEL

Workers - Inhalation; Long term systemic effects: 22 mg/m³
 Workers - Dermal; Long term systemic effects: 60 mg/kg/day
 General population, Consumer - Inhalation; Long term systemic effects: 6.5 mg/m³
 General population, Consumer - Dermal; Long term systemic effects: 36 mg/kg/day
 General population, Consumer - Oral; Long term systemic effects: 3.8 mg/kg/day
 General population - Oral; Long term systemic effects: 0.75 mg/kg/day
 General population - Inhalation; Long term systemic effects: 1.3 mg/m³
 Workers - Inhalation; Long term systemic effects: 5.29 mg/m³
 General population - Dermal; Long term systemic effects: 14.43 mg/kg/day
 Workers - Dermal; Long term systemic effects: 28.85 mg/kg/day

PNEC

Fresh water; 4.4 µg/l
 marine water; 0.44 µg/l
 STP; 1 mg/l
 Sediment (Freshwater); 2 mg/kg
 Sediment (Marinewater); 0.394 mg/kg
 Soil; 0.31 mg/kg
 Secondary poisoning.; 3.3 mg/kg

(L) BUTYLPHENYL METHYLPROPIONAL (CAS: 80-54-6)

DNEL

Workers - Inhalation; Long term systemic effects: 0.44 mg/m³
 Workers - Dermal; Short term local effects: 0.41 mg/cm²
 Workers - Dermal; Long term systemic effects: 2.075 mg/kg
 Consumer - Inhalation; Long term systemic effects: 0.11 mg/m³
 Consumer - Oral; Long term systemic effects: 0.0625 mg/kg
 Consumer - Dermal; Long term systemic effects: 1.0375 mg/kg
 Consumer - Dermal; Short term local effects: 0.41 mg/cm²

PNEC

- Fresh water; 0.00204 mg/l
 - marine water; 0.00202 mg/l
 - Sediment (Freshwater); 0.269 mg/kg
 - Sediment (Marinewater); 0.0269 mg/kg
 - Soil; 0.0525 mg/kg
 - STP; 10 mg/l

HEXYL SALICYLATE (CAS: 6259-76-3)

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DNEL

Workers - Inhalation; Long term systemic effects: 1.7 mg/m³
 Workers - Dermal; Long term systemic effects: 6.4 mg/kg/day
 Consumer - Inhalation; Long term systemic effects: 0.4 mg/m³
 Consumer - Dermal; Long term systemic effects: 3.2 mg/kg/day
 Consumer - Oral; Long term systemic effects: 0.3 mg/kg/day

PNEC

Fresh water; 0 mg/l
 marine water; 0 mg/l
 STP; 10 mg/l
 Sediment (Freshwater); 0.272 mg/kg
 Sediment (Marinewater); 0.027 mg/kg
 Soil; 0.054 mg/kg

GERANIOL (CAS: 106-24-1)

DNEL

Workers - Inhalation; Long term systemic effects: 161.6 mg/l
 Workers - Dermal; Long term systemic effects: 12.5 mg/kg
 Consumer - Oral; Long term systemic effects: 13.75 mg/kg
 Consumer - Inhalation; Long term systemic effects: 47.8 mg/m³
 Consumer - Dermal; Long term systemic effects: 7.5 mg/kg

DIHYDROGEN (ETHYL)[4-[4-[ETHYL(3-SULPHONATOBENZYL)]AMINO]-2'-SULPHONATOBENZHYDRYLIDENE]CYCLOHEXA-2,5-DIEN-1-YLIDENE](3-SULPHONATOBENZYL)AMMONIUM, DISODIUM SALT (CAS: 3844-45-9)

Ingredient comments No exposure limits known for ingredient(s).

BENZOPHENONE (CAS: 119-61-9)

Ingredient comments No exposure limits known for ingredient(s).

METHYL CEDRYL KETONE (CAS: 32388-55-9)

DNEL

Workers - Inhalation; Long term systemic effects: 1.175 mg/m³
 Workers - Dermal; Long term systemic effects: 0.333 mg/kg/day
 Consumer - Inhalation; Long term systemic effects: 0.289 mg/m³
 Consumer - Oral; Long term systemic effects: 0.166 mg/kg/day
 Consumer - Dermal; Long term systemic effects: 0.166 mg/kg/day
 General population - Oral; Long term systemic effects: 0.166 mg/kg/day
 General population - Dermal; Long term systemic effects: 0.166 mg/kg/day
 General population - Inhalation; Long term systemic effects: 0.289 mg/m³

PNEC

Fresh water; 1.74 µg/l
 marine water; 0.174 µg/l
 STP; 10 mg/l
 Sediment (Freshwater); 24.4 mg/kg
 Sediment (Marinewater); 2.44 mg/kg
 Soil; 4.87 mg/kg

AMYLASE, alpha (CAS: 9000-90-2)

DMEL

Workers - Inhalation; Long term local effects: 60 ng/m³
 Consumer, Professional - Inhalation; Long term local effects: 15 ng/m³

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PNEC

- Fresh water; 5.2 µg/l
- marine water; 0.52 µg/l
- STP; 65000 µg/l

PECTATE LYASE (CAS: 9015-75-2)

DMEL Workers - Inhalation; Long term local effects: 60 ng/m³

DODECANAL (CAS: 112-54-9)

DNEL

- Workers - Inhalation; Long term systemic effects: 49.7 mg/m³
- Workers - Dermal; Long term systemic effects: 14.1 mg/kg/day
- Workers - Dermal, Inhalation; Long term local effects: 0,00057 mg/cm²
- Consumer - Inhalation; Long term systemic effects: 12.3 mg/m³
- Consumer - Dermal; Long term systemic effects: 7 mg/kg/day
- Consumer - Oral; Long term systemic effects: 0.00028 mg/cm²
- Consumer - Oral; Long term systemic effects: 7 mg/kg/day

PNEC

- Fresh water; 0.0035 mg/l
- marine water; 0.00035 mg/l
- STP; 10 mg/l

1,2-BENZISOTHIAZOL-3(2H)-ONE (CAS: 2634-33-5)

DNEL

- Workers - Dermal; Long term systemic effects: 0.966 mg/kg
- Workers - Inhalation; Long term systemic effects: 6.81 mg/m³
- Consumer - Inhalation; Long term systemic effects: 1.2 mg/m³

PNEC

- Fresh water; 0.004 mg/l
- marine water; 0.0004 mg/l
- Intermittent release; 0.0011 mg/l
- STP; 1.03 mg/l
- Sediment (Freshwater); 0.0499 mg/kg
- Sediment (Marinewater); 0.00499 mg/kg
- Soil; 3.0 mg/kg

5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE [EC NO. 247-500-7] & 2-METHYL-2H-ISOTHIAZOL-3-ONE [EC NO. 220-239-6] (3:1) (CAS: 55965-84-9)

DNEL

- Workers - Inhalation; Long term local effects: 0.02 mg/m³
- Workers - Inhalation; Short term local effects: 0.04 mg/m³
- Consumer - Inhalation; Long term local effects: 0.02 mg/m³
- Consumer - Inhalation; Short term local effects: 0.04 mg/m³
- Consumer - Oral; Long term systemic effects: 0.09 mg/kg/day
- Consumer - Oral; Short term systemic effects: 0.11 mg/kg/day

PNEC

- Fresh water; 3.32 µg/l
- marine water; 3.32 µg/l
- STP; 0.32 mg/l
- Soil; 0.01 mg/kg/day
- Sediment (Freshwater); 0.027 mg/kg/day
- Sediment (Marinewater); 0.027 mg/kg/day

8.2. Exposure controls

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Protective equipment



Appropriate engineering controls

Provide adequate ventilation.

Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Unless the assessment indicates a higher degree of protection is required, the following protection should be worn: Tight-fitting safety glasses. Personal protective equipment for eye and face protection should comply with European Standard EN166.

Hand protection

The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. To protect hands from chemicals, gloves should comply with European Standard EN374.

Other skin and body protection

Wear suitable protective clothing as protection against splashing or contamination.

Hygiene measures

Wash at the end of each work shift and before eating, smoking and using the toilet. When using do not eat, drink or smoke.

Respiratory protection

No specific recommendations. Respiratory protection may be required if excessive airborne contamination occurs. EN 136/140/141/145/143/149

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Liquid.
Odour threshold	No information available.
pH	No information available.
Melting point	No information available.
Pour Point	No information available.
Freezing Point	No information available.
Initial boiling point and range	No information available.
Flash point	No information available.
Evaporation rate	No information available.
Evaporation factor	No information available.
Flammability (solid, gas)	No information available.
Upper/lower flammability or explosive limits	No information available.
Other flammability	No information available.
Vapour pressure	No information available.
Vapour density	No information available.
Relative density	No information available.

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Bulk density	No information available.
Solubility(ies)	Soluble in water.
Partition coefficient	No information available.
Auto-ignition temperature	No information available.
Decomposition Temperature	No information available.
Viscosity	No information available.
Explosive properties	No information available.
Explosive under the influence of a flame	No information available.
Oxidising properties	No information available.

9.2. Other information

Other information	Not determined.
Refractive index	No information available.
Particle size	No information available.
Molecular weight	No information available.
Volatility	No information available.
Saturation concentration	No information available.
Critical temperature	No information available.
Volatile organic compound	No information available.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	There are no known reactivity hazards associated with this product.
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10.2. Chemical stability

Stability	Stable at normal ambient temperatures.
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10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	Not determined.
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10.4. Conditions to avoid

Conditions to avoid	Avoid excessive heat for prolonged periods of time.
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10.5. Incompatible materials

Materials to avoid	Not determined.
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10.6. Hazardous decomposition products

Hazardous decomposition products	Oxides of carbon. Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.
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SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

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ATE oral (mg/kg) 5,233.57

Skin corrosion/irritation

Skin corrosion/irritation Causes skin irritation.

Serious eye damage/irritation

Serious eye damage/irritation Causes serious eye damage.

Respiratory sensitisation

Respiratory sensitisation No information available.

Skin sensitisation

Skin sensitisation May cause an allergic skin reaction.

Germ cell mutagenicity

Genotoxicity - in vitro No information available.

Carcinogenicity

Carcinogenicity No information available.

Reproductive toxicity

Reproductive toxicity - fertility No information available.

Specific target organ toxicity - single exposure

STOT - single exposure No information available.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure No information available.

Aspiration hazard

Aspiration hazard No information available.

Inhalation May cause respiratory irritation.

Ingestion Ingestion may cause severe irritation of the mouth, the oesophagus and the gastrointestinal tract.

Skin contact Causes skin irritation. May cause an allergic skin reaction.

Eye contact Causes serious eye damage.

Toxicological information on ingredients.

BENZENESULPHONIC ACID MONO C10 - 13 ALKYL DERIVS SODIUM SALTS

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 1,080.0

Species Rat

ATE oral (mg/kg) 1,080.0

Acute toxicity - dermal

Notes (dermal LD₅₀) LD₅₀ >2000 mg/kg, Oral, Rat

Skin corrosion/irritation

Animal data Causes skin irritation. OECD 404 Rabbit

Serious eye damage/irritation

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Serious eye damage/irritation	Causes serious eye damage. Rabbit OECD 405
<u>Respiratory sensitisation</u>	
Respiratory sensitisation	No information available.
<u>Skin sensitisation</u>	
Skin sensitisation	Not sensitising. Guinea pig maximization test (GPMT) OECD 406
<u>Germ cell mutagenicity</u>	
Genotoxicity - in vitro	Chromosome aberration: Negative. This substance has no evidence of mutagenic properties.
<u>Carcinogenicity</u>	
Carcinogenicity	Scientifically unjustified.
<u>Reproductive toxicity</u>	
Reproductive toxicity - fertility	Two-generation study - NOAEL 350 mg/kg, Oral, Rat F2a
Reproductive toxicity - development	Teratogenicity: - NOAEL: 300 mg/kg, Oral, Rat
<u>Specific target organ toxicity - single exposure</u>	
STOT - single exposure	No information available.
<u>Specific target organ toxicity - repeated exposure</u>	
STOT - repeated exposure	NOAEL 125 mg/kg, Oral, Rat
Target organs	Spleen Heart & cardiovascular system Liver
<u>Aspiration hazard</u>	
Aspiration hazard	Not relevant.
Inhalation	Dust may irritate the respiratory system.
Ingestion	Harmful if swallowed.
Skin contact	Irritating to skin.
Eye contact	Causes serious eye damage.

ALCOHOLS, C12-14, ETHOXYLATED, SULFATES, SODIUM SALTS

<u>Acute toxicity - oral</u>	
Acute toxicity oral (LD₅₀ mg/kg)	4,100.0
Species	Rat
ATE oral (mg/kg)	4,100.0
<u>Acute toxicity - dermal</u>	
Notes (dermal LD₅₀)	LD ₅₀ >2000 mg/kg, Dermal, Rat
<u>Skin corrosion/irritation</u>	
Skin corrosion/irritation	Causes skin irritation.

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Serious eye damage/irritation

Serious eye damage/irritation Causes serious eye damage.

Respiratory sensitisation

Respiratory sensitisation Not sensitising.

Skin sensitisation

Skin sensitisation Not sensitising. Guinea pig

Germ cell mutagenicity

Genotoxicity - in vitro Based on available data the classification criteria are not met. Ames test OECD 471

Carcinogenicity

Carcinogenicity Based on available data the classification criteria are not met.

Reproductive toxicity

Reproductive toxicity - fertility - NOAEL >300 mg/kg, Oral, Rat OECD 416

Reproductive toxicity - development - NOAEL: >1000 mg/kg, Oral, Rat OECD 414

Specific target organ toxicity - repeated exposure

STOT - repeated exposure NOAEL >225 mg/kg, Oral, Rat OECD 408

Inhalation Gas or vapour in high concentrations may irritate the respiratory system.

Ingestion May cause burns in mucous membranes, throat, oesophagus and stomach.

Skin contact Causes skin irritation.

Eye contact Causes serious eye damage.

TRIETHANOLAMINE

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 6,400.0

Species Rat

ATE oral (mg/kg) 6,400.0

Acute toxicity - dermal

Notes (dermal LD₅₀) LD₅₀ >2000 mg/kg, Dermal, Rat

Skin corrosion/irritation

Skin corrosion/irritation Not irritating.

Animal data No information available.

Serious eye damage/irritation

Serious eye damage/irritation No information available.

Respiratory sensitisation

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Respiratory sensitisation	No information available.
<u>Skin sensitisation</u>	
Skin sensitisation	No information available.
<u>Germ cell mutagenicity</u>	
Genotoxicity - in vitro	No information available.
Genotoxicity - in vivo	Negative.
<u>Carcinogenicity</u>	
Carcinogenicity	Data lacking.
IARC carcinogenicity	IARC Group 3 Not classifiable as to its carcinogenicity to humans.
<u>Reproductive toxicity</u>	
Reproductive toxicity - fertility	No information available.
Reproductive toxicity - development	Data lacking.
<u>Specific target organ toxicity - single exposure</u>	
STOT - single exposure	No information available.
<u>Specific target organ toxicity - repeated exposure</u>	
STOT - repeated exposure	No information available.
<u>Aspiration hazard</u>	
Aspiration hazard	No information available.
.	
Inhalation	May cause respiratory irritation.
Ingestion	Ingestion may cause severe irritation of the mouth, the oesophagus and the gastrointestinal tract.
Skin contact	May be slightly irritating to skin.
Eye contact	May cause temporary eye irritation.

(L) HEXYL CINNAMAL

Acute toxicity - oral

Acute toxicity oral (LD ₅₀ mg/kg)	3,100.0
Species	Rat
Notes (oral LD ₅₀)	LD ₅₀ 3100 mg/kg, Oral, Rat
ATE oral (mg/kg)	3,100.0

Acute toxicity - dermal

Notes (dermal LD ₅₀)	LD ₅₀ > 3000 mg/kg, Dermal, Rabbit
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Skin corrosion/irritation

LAUNDRY DETERGENT BIO

Skin corrosion/irritation Based on available data the classification criteria are not met. Erythema/eschar score: Well defined erythema (2).

Serious eye damage/irritation

Serious eye damage/irritation Slightly irritating. Conjunctivae score: 0.33

Respiratory sensitisation

Respiratory sensitisation No information available.

Skin sensitisation

Skin sensitisation - Mouse: Sensitising.

Germ cell mutagenicity

Genotoxicity - in vitro Bacterial reverse mutation test: Negative.

Genotoxicity - in vivo DNA damage and/or repair: Negative.

Carcinogenicity

Carcinogenicity No information available.

Reproductive toxicity

Reproductive toxicity - fertility No information available.

Reproductive toxicity - development No information available.

Specific target organ toxicity - single exposure

STOT - single exposure NOAEL 100 mg/kg, Oral, Rat

Specific target organ toxicity - repeated exposure

STOT - repeated exposure NOAEL (14d) 150 mg/kg/day, Oral, Rat LOAEL (90d) 125 mg/kg/day, Dermal, Rat

Aspiration hazard

Aspiration hazard No information available.

Inhalation Gas or vapour in high concentrations may irritate the respiratory system.

Ingestion The product irritates mucous membranes and may cause abdominal discomfort if swallowed.

Skin contact May cause an allergic skin reaction. Symptoms following overexposure may include the following: Irritation. Redness.

Eye contact May cause temporary eye irritation.

SUBTILISIN

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 1,800.0

Species Rat

Notes (oral LD₅₀) Harmful if swallowed. LD₅₀ 1800 mg/kg, Oral, Rat OECD 401

LAUNDRY DETERGENT BIO

ATE oral (mg/kg) 1,800.0

Skin corrosion/irritation

Skin corrosion/irritation Slightly irritating.

Serious eye damage/irritation

Serious eye damage/irritation Slightly irritating.

Respiratory sensitisation

Respiratory sensitisation May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Germ cell mutagenicity

Genotoxicity - in vitro This substance has no evidence of mutagenic properties.

Specific target organ toxicity - single exposure

STOT - single exposure May cause respiratory irritation.

(L) BENZYL SALICYLATE

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 2,200.0

Species Rat

Notes (oral LD₅₀) LD₅₀ 2200 mg/kg, Oral, Rat

ATE oral (mg/kg) 2,200.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 14,150.0

Species Rabbit

Notes (dermal LD₅₀) LD₅₀ 14150 mg/kg, Dermal, Rabbit

Skin corrosion/irritation

Skin corrosion/irritation No information available.

Serious eye damage/irritation

Serious eye damage/irritation Causes serious eye irritation.

Respiratory sensitisation

Respiratory sensitisation No information available.

Skin sensitisation

Skin sensitisation May cause an allergic skin reaction.
Local Lymph Node Assay (LLNA) - Mouse: Sensitising.

Germ cell mutagenicity

Genotoxicity - in vitro Bacterial reverse mutation test: Negative.

Carcinogenicity

Carcinogenicity No information available.

LAUNDRY DETERGENT BIO

Reproductive toxicity

Reproductive toxicity - fertility No information available.

Reproductive toxicity - development No information available.

Specific target organ toxicity - single exposure

STOT - single exposure No information available.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure No information available.

Aspiration hazard

Aspiration hazard No information available.

Inhalation Gas or vapour in high concentrations may irritate the respiratory system.

Ingestion The product irritates mucous membranes and may cause abdominal discomfort if swallowed.

Skin contact May cause an allergic skin reaction. Symptoms following overexposure may include the following: Irritation. Redness.

Eye contact Causes serious eye irritation. Symptoms following overexposure may include the following: Pain or irritation. Profuse watering of the eyes. Redness.

AMYL SALICYLATE

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 2,000.0

Species Rat

Notes (oral LD₅₀) LD₅₀ 2000 mg/kg, Oral, Rat

ATE oral (mg/kg) 2,000.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 5,000.0

Species Rabbit

Notes (dermal LD₅₀) LD₅₀ 5000 mg/kg, Dermal, Rabbit

ATE dermal (mg/kg) 5,000.0

1-(1,2,3,4,5,6,7,8 OCTAHYDRO2,3,8,8-TETRAMETHYL-2-NAPHTHYL)ETHAN-1-ONE

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 5,001.0

Species Rat

Notes (oral LD₅₀) LD₅₀ > 5000 mg/kg, Oral, Rat

LAUNDRY DETERGENT BIO

ATE oral (mg/kg) 5,001.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 5,001.0

Species Rabbit

Notes (dermal LD₅₀) LD₅₀ > 5000 mg/kg, Dermal, Rabbit

ATE dermal (mg/kg) 5,001.0

Skin sensitisation

Skin sensitisation Guinea pig maximization test (GPMT) - Guinea pig: Sensitising.

Germ cell mutagenicity

Genotoxicity - in vitro Bacterial reverse mutation test: Negative. Chromosome aberration: Negative.

1,2-BENZISOTHIAZOL-3(2H)-ONE

Acute toxicity - oral

Notes (oral LD₅₀) LD₅₀ 670 mg/kg, Oral, Rat NOAEL 25 mg/kg/day, Oral, Rat 90 days

ATE oral (mg/kg) 500.0

Acute toxicity - dermal

Notes (dermal LD₅₀) LD₅₀ > 5000 mg/kg, Dermal, Rat

Acute toxicity - inhalation

Notes (inhalation LC₅₀) LC₅₀ 5.71 mg/l, Inhalation, Rat

Skin corrosion/irritation

Skin corrosion/irritation Causes skin irritation. Rabbit

Serious eye damage/irritation

Serious eye damage/irritation Causes serious eye damage.

Skin sensitisation

Skin sensitisation Guinea pig maximization test (GPMT) - Guinea pig: Sensitising.

Germ cell mutagenicity

Genotoxicity - in vitro This substance has no evidence of mutagenic properties.

Genotoxicity - in vivo Based on available data the classification criteria are not met. OECD 474

Reproductive toxicity

Reproductive toxicity - fertility Fertility, Two-generation study - NOAEL 56.6 mg/kg, Oral, Rat Based on available data the classification criteria are not met.

Reproductive toxicity - development Developmental toxicity: - NOAEL: 112 mg/kg, Oral, Rat Based on available data the classification criteria are not met.

HEXAMETHYLINDANOPYRAN

Acute toxicity - oral

LAUNDRY DETERGENT BIO

Acute toxicity oral (LD₅₀ mg/kg) 4,640.0

Species Rat

Notes (oral LD₅₀) LD₅₀ 4640 mg/kg, Oral, Rat

ATE oral (mg/kg) 4,640.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 6,500.0

Species Rabbit

Notes (dermal LD₅₀) LD₅₀ 6500 mg/kg, Dermal, Rabbit

ATE dermal (mg/kg) 6,500.0

Germ cell mutagenicity

Genotoxicity - in vitro Bacterial reverse mutation test: Negative.

HEXYL SALICYLATE

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 5,001.0

Species Rat

Notes (oral LD₅₀) LD₅₀ > 5000 mg/kg, Oral, Rat

ATE oral (mg/kg) 5,001.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 5,001.0

Species Rabbit

Notes (dermal LD₅₀) LD₅₀ > 5000 mg/kg, Dermal, Rabbit

ATE dermal (mg/kg) 5,001.0

Skin corrosion/irritation

Skin corrosion/irritation Irritating to skin. Rabbit

Serious eye damage/irritation

Serious eye damage/irritation Causes serious eye irritation.

Respiratory sensitisation

Respiratory sensitisation No information available.

Skin sensitisation

Skin sensitisation May cause an allergic skin reaction.

Germ cell mutagenicity

Genotoxicity - in vitro Bacterial reverse mutation test: Negative.

LAUNDRY DETERGENT BIO

Carcinogenicity

Carcinogenicity No information available.

Reproductive toxicity

Reproductive toxicity - fertility No information available.

Reproductive toxicity - development No information available.

Specific target organ toxicity - single exposure

STOT - single exposure No information available.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure No information available.

Aspiration hazard

Aspiration hazard No information available.

Inhalation Gas or vapour in high concentrations may irritate the respiratory system.

Ingestion Ingestion may cause severe irritation of the mouth, the oesophagus and the gastrointestinal tract.

Skin contact Causes skin irritation. May cause an allergic skin reaction.

Eye contact May cause temporary eye irritation.

(L) BUTYLPHENYL METHYLPROPIONAL

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 1,390.0

Species Rat

Notes (oral LD₅₀) LD₅₀ 1390 mg/kg, Oral, Rat

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 2,001.0

Species Rabbit

Notes (dermal LD₅₀) LD₅₀ > 2000 mg/kg, Dermal, Rabbit

ATE dermal (mg/kg) 2,001.0

ALPHA ISOMETHYL IONONE

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 5,000.0

Species Rat

Notes (oral LD₅₀) LD₅₀ 5000 mg/kg, Oral, Rat

LAUNDRY DETERGENT BIO

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ 5,000.0 mg/kg)

Species Rabbit

Notes (dermal LD₅₀) LD₅₀ 5000 mg/kg, Dermal, Rabbit

Skin corrosion/irritation

Skin corrosion/irritation Irritating to skin. Rabbit

Germ cell mutagenicity

Genotoxicity - in vitro Bacterial reverse mutation test: Negative.

GERANIOL

Acute toxicity - oral

Acute toxicity oral (LD₅₀ 3,600.0 mg/kg)

Species Rat

Notes (oral LD₅₀) LD₅₀ 3600 mg/kg, Oral, Rat

ATE oral (mg/kg) 3,600.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ 5,001.0 mg/kg)

Species Rabbit

Notes (dermal LD₅₀) LD₅₀ > 5000 mg/kg, Dermal, Rabbit

ATE dermal (mg/kg) 5,001.0

Skin corrosion/irritation

Skin corrosion/irritation Causes skin irritation.
Severe skin irritation. Rabbit

Serious eye damage/irritation

Serious eye damage/irritation Causes serious eye damage.
Severe irritation. Cornea score: 3.1 - Rabbit

Skin sensitisation

Skin sensitisation May cause an allergic skin reaction.
Local Lymph Node Assay (LLNA) - Mouse: Sensitising.

DIHYDROGEN (ETHYL)[4-[4-[ETHYL(3-SULPHONATOBENZYL)]AMINO]-2'-SULPHONATOBENZHYDRYLIDENE]CYCLOHEXA-2,5-DIEN-1-YLIDENE](3-SULPHONATOBENZYL)AMMONIUM, DISODIUM SALT

Acute toxicity - oral

Acute toxicity oral (LD₅₀ 2,000.0 mg/kg)

Species Rat

LAUNDRY DETERGENT BIO

Notes (oral LD₅₀)	LD ₅₀ > 5000 mg/kg, Oral, Rat
<u>Acute toxicity - dermal</u>	
Notes (dermal LD₅₀)	Based on available data the classification criteria are not met.
<u>Acute toxicity - inhalation</u>	
Notes (inhalation LC₅₀)	Based on available data the classification criteria are not met.
<u>Skin corrosion/irritation</u>	
Animal data	Not irritating. Rabbit OECD 404
<u>Serious eye damage/irritation</u>	
Serious eye damage/irritation	Not irritating. Rabbit OECD 405
<u>Respiratory sensitisation</u>	
Respiratory sensitisation	Not sensitising.
<u>Skin sensitisation</u>	
Skin sensitisation	Local Lymph Node Assay (LLNA) - Mouse: Not sensitising. OECD 429
<u>Germ cell mutagenicity</u>	
Genotoxicity - in vitro	This substance has no evidence of mutagenic properties.
Genotoxicity - in vivo	This substance has no evidence of mutagenic properties.
<u>Carcinogenicity</u>	
Carcinogenicity	There is no evidence that the product can cause cancer.
IARC carcinogenicity	IARC Group 3 Not classifiable as to its carcinogenicity to humans.
<u>Reproductive toxicity</u>	
Reproductive toxicity - fertility	This substance has no evidence of toxicity to reproduction. Read-across data.
Reproductive toxicity - development	This substance has no evidence of toxicity to reproduction. Read-across data.
<u>Specific target organ toxicity - single exposure</u>	
STOT - single exposure	Not classified as a specific target organ toxicant after a single exposure.
<u>Specific target organ toxicity - repeated exposure</u>	
STOT - repeated exposure	Not classified as a specific target organ toxicant after repeated exposure.
<u>Aspiration hazard</u>	
Aspiration hazard	Based on available data the classification criteria are not met.
Inhalation	Dust in high concentrations may irritate the respiratory system.
Ingestion	May cause discomfort if swallowed.
Skin contact	Skin irritation should not occur when used as recommended.
Eye contact	Solid particles trapped behind the eyelid may cause abrasive damage.

BENZOPHENONE

LAUNDRY DETERGENT BIO

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 10,000.0

Species Rat

ATE oral (mg/kg) 10,000.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 3,535.0

Species Rabbit

ATE dermal (mg/kg) 3,535.0

Carcinogenicity

IARC carcinogenicity IARC Group 2B Possibly carcinogenic to humans.

Inhalation May cause irritation.

Ingestion May cause discomfort if swallowed.

Skin contact Slightly irritating.

Eye contact May cause temporary eye irritation.

COUMARIN

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 500.0

Species Rat

Notes (oral LD₅₀) LD₅₀ 500 mg/kg, Oral, Rat

ATE oral (mg/kg) 500.0

DISUBSTITUTED ALANINAMIDE

Acute toxicity - oral

Notes (oral LD₅₀) LD₅₀ > 2000 mg/kg, Oral, OECD 423

Skin corrosion/irritation

Skin corrosion/irritation Not irritating.

Serious eye damage/irritation

Serious eye damage/irritation Based on available data the classification criteria are not met.

Skin sensitisation

Skin sensitisation Sensitising.

Germ cell mutagenicity

Genotoxicity - in vitro This substance has no evidence of mutagenic properties. Ames test

LAUNDRY DETERGENT BIO

PECTATE LYASE

Acute toxicity - oral

Notes (oral LD₅₀) LD₅₀ >2000 mg/kg, Oral, OECD 401

Skin corrosion/irritation

Skin corrosion/irritation Not irritating. OECD 404

Serious eye damage/irritation

Serious eye damage/irritation Not irritating. OECD 405

Respiratory sensitisation

Respiratory sensitisation Sensitising.

Germ cell mutagenicity

Genotoxicity - in vitro This substance has no evidence of mutagenic properties.

AMYLASE, alpha

Acute toxicity - oral

Notes (oral LD₅₀) LD₅₀ >2000 mg/kg, Oral, OECD 401

Skin corrosion/irritation

Skin corrosion/irritation Not irritating. OECD 404

Serious eye damage/irritation

Serious eye damage/irritation Not irritating. OECD 405

Respiratory sensitisation

Respiratory sensitisation Sensitising.

Germ cell mutagenicity

Genotoxicity - in vitro Based on available data the classification criteria are not met.

DODECANAL

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 23,100.0

Species Rat

ATE oral (mg/kg) 23,100.0

Acute toxicity - dermal

Notes (dermal LD₅₀) LD₅₀ > 2000 mg/kg, Dermal, Rat

Skin corrosion/irritation

Skin corrosion/irritation Causes skin irritation.

Serious eye damage/irritation

Serious eye damage/irritation Causes serious eye irritation.

Respiratory sensitisation

LAUNDRY DETERGENT BIO

Respiratory sensitisation No information available.

Skin sensitisation

Skin sensitisation May cause an allergic skin reaction.
Local Lymph Node Assay (LLNA) - Mouse: Sensitising.

Germ cell mutagenicity

Genotoxicity - in vitro Bacterial reverse mutation test: Negative. OECD 471
Genome mutation: Negative. OECD 476

Carcinogenicity

Carcinogenicity No information available.

Reproductive toxicity

Reproductive toxicity - fertility No information available.

Reproductive toxicity - development No information available.

Specific target organ toxicity - single exposure

STOT - single exposure No information available.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure NOAEL (90d) 2000 mg/kg, Oral, Rat

Aspiration hazard

Aspiration hazard No information available.

Inhalation May cause respiratory irritation.

Ingestion The product irritates mucous membranes and may cause abdominal discomfort if swallowed.

Skin contact Causes skin irritation. May cause an allergic skin reaction. Symptoms following overexposure may include the following: Irritation. Redness.

Eye contact Causes serious eye irritation.

1,2-BENZISOTHIAZOL-3(2H)-ONE

Acute toxicity - oral

Notes (oral LD₅₀) LD₅₀ 675.3 mg/kg, Oral, Rat Harmful if swallowed.

ATE oral (mg/kg) 500.0

Acute toxicity - dermal

Notes (dermal LD₅₀) LD₅₀ > 5000 mg/kg, Dermal, Rabbit

Acute toxicity - inhalation

Notes (inhalation LC₅₀) Not determined.

Skin corrosion/irritation

Skin corrosion/irritation Causes skin irritation.

Serious eye damage/irritation

LAUNDRY DETERGENT BIO

Serious eye damage/irritation Causes serious eye damage. May cause permanent damage if eye is not immediately irrigated. May cause chemical eye burns.

Respiratory sensitisation

Respiratory sensitisation No information available.

Skin sensitisation

Skin sensitisation May cause an allergic skin reaction.

Germ cell mutagenicity

Genotoxicity - in vitro Negative.

Carcinogenicity

Carcinogenicity No information available.

Reproductive toxicity

Reproductive toxicity - fertility This substance has no evidence of toxicity to reproduction.

Reproductive toxicity - development This substance has no evidence of toxicity to reproduction.

Specific target organ toxicity - single exposure

STOT - single exposure Not classified as a specific target organ toxicant after a single exposure.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure Based on available data the classification criteria are not met. Not classified as a specific target organ toxicant after repeated exposure.

Aspiration hazard

Aspiration hazard Based on available data the classification criteria are not met.

Inhalation Gas or vapour in high concentrations may irritate the respiratory system.

Ingestion Harmful if swallowed.

Skin contact Causes skin irritation. May cause an allergic skin reaction.

Eye contact Causes serious eye damage. May cause permanent damage if eye is not immediately irrigated. May cause chemical eye burns.

5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE [EC NO. 247-500-7] & 2-METHYL-2H-ISOTHIAZOL-3-ONE [EC NO. 220-239-6] (3:1)

Acute toxicity - oral

Notes (oral LD₅₀) LD₅₀ 100 mg/kg, Oral, Rat

ATE oral (mg/kg) 100.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 141.0

Species Rabbit

Notes (dermal LD₅₀) LD₅₀ 660 mg/kg, Dermal, Rabbit

LAUNDRY DETERGENT BIO

ATE dermal (mg/kg) 141.0

Acute toxicity - inhalation

Acute toxicity inhalation
(LC₅₀ dust/mist mg/l) 0.33

Species Rat

Notes (inhalation LC₅₀) LC₅₀ 2.36 mg/l, Inhalation, Rat

ATE inhalation
(dusts/mists mg/l) 0.33

Skin corrosion/irritation

Skin corrosion/irritation Causes severe burns.

Serious eye damage/irritation

Serious eye
damage/irritation May cause chemical eye burns.

Respiratory sensitisation

Respiratory sensitisation Guinea pig: Sensitising.

Skin sensitisation

Skin sensitisation Guinea pig maximization test (GPMT) - Guinea pig: Sensitising.

Germ cell mutagenicity

Genotoxicity - in vitro Inconclusive data.

Genotoxicity - in vivo Chromosome aberration: Negative. Rat
Chromosome aberration: Negative. Mouse

Carcinogenicity

Carcinogenicity No evidence of carcinogenicity in animal studies.

Reproductive toxicity

Reproductive toxicity -
fertility Fertility - NOAEL (90d) 16.3 - 24.7 mg/kg, Oral, Rat F1 Fertility, Two-generation
study - NOAEL (P) 2.8 - 4.4, (F1) 22.7 - 28, (F2) 35.7 - 39.1 mg/kg, Oral, Rat

Reproductive toxicity -
development Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure

STOT - single exposure Not classified as a specific target organ toxicant after a single exposure.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure Not classified as a specific target organ toxicant after repeated exposure. NOAEL
(90 d) 16.3 - 24.7 mg/kg, Oral, Rat NOAEL (91 d) ≤0.104 mg/kg, Dermal, Rat
NOAEL (91 d) 0.00034 mg/l, Inhalation, Rat

SECTION 12: Ecological information

Ecotoxicity The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Ecological information on ingredients.

LAUNDRY DETERGENT BIO

BENZENESULPHONIC ACID MONO C10 - 13 ALKYL DERIVS SODIUM SALTS

Ecotoxicity Harmful to aquatic life with long lasting effects.

TRIETHANOLAMINE

Ecotoxicity The product components are not classified as environmentally hazardous. However, large or frequent spills may have hazardous effects on the environment.

(L) HEXYL CINNAMAL

Ecotoxicity Toxic to aquatic life with long lasting effects.

SUBTILISIN

Ecotoxicity Very toxic to aquatic life with long lasting effects.

(L) BENZYL SALICYLATE

Ecotoxicity Harmful to aquatic life with long lasting effects.

HEXYL SALICYLATE

Ecotoxicity Very toxic to aquatic life with long lasting effects.

DIHYDROGEN (ETHYL)[4-[4-[ETHYL(3-SULPHONATOBENZYL)]AMINO]-2'-SULPHONATOBENZHYDRYLIDENE]CYCLOHEXA-2,5-DIEN-1-YLIDENE](3-SULPHONATOBENZYL)AMMONIUM, DISODIUM SALT

Ecotoxicity The product is not expected to be hazardous to the environment. However, large or frequent spills may have hazardous effects on the environment.

BENZOPHENONE

Ecotoxicity The product contains a substance which is very toxic to aquatic organisms and which may cause long-term adverse effects in the aquatic environment.

DODECANAL

Ecotoxicity The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

1,2-BENZISOTHIAZOL-3(2H)-ONE

Ecotoxicity Very toxic to aquatic life. Harmful to aquatic life with long lasting effects.

12.1. Toxicity

Toxicity Not considered toxic to fish.

Ecological information on ingredients.

BENZENESULPHONIC ACID MONO C10 - 13 ALKYL DERIVS SODIUM SALTS

Toxicity Harmful to aquatic life with long lasting effects.

Acute aquatic toxicity

LAUNDRY DETERGENT BIO

Acute toxicity - fish	LC ₅₀ , 96 hours: 1.67 mg/l, <i>Lepomis macrochirus</i> (Bluegill)
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: 2.9 mg/l, <i>Daphnia magna</i>
Acute toxicity - aquatic plants	ErC ₅₀ , 96 hours: 29 mg/l, <i>Pseudokirchneriella subcapitata</i>
<u>Chronic aquatic toxicity</u>	
Chronic toxicity - fish early life stage	NOEC, 28 - 196 days: 0.23 - 3.2 mg/l, Fish
Short term toxicity - embryo and sac fry stages	NOEC, : 0.23 mg/l, <i>Oncorhynchus mykiss</i> (Rainbow trout)
Chronic toxicity - aquatic invertebrates	NOEC, 2 - 32 days: 0.59 - 4.5 mg/l, <i>Daphnia magna</i> EC ₅₀ , 21 days: 1.67 mg/l, <i>Daphnia magna</i>

ALCOHOLS, C12-14, ETHOXYLATED, SULFATES, SODIUM SALTS

Acute aquatic toxicity

Acute toxicity - fish	LC ₅₀ , 96 hours: >7.1 mg/l, Fish OECD 203
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: 7.4 mg/l, <i>Daphnia magna</i> OECD 202 NOEC, 48 hours: 0.27 mg/l, <i>Daphnia magna</i>
Acute toxicity - aquatic plants	EC ₅₀ , 72 hours: 27.7 mg/l, Algae OECD 201

TRIETHANOLAMINE

Toxicity	Not considered toxic to fish.
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Acute aquatic toxicity

Acute toxicity - fish	LC ₅₀ , 96 hours: 11800 mg/l, <i>Pimephales promelas</i> (Fat-head Minnow)
Acute toxicity - aquatic invertebrates	EC ₅₀ , 24 hours: 2038 mg/l, <i>Daphnia magna</i>
Acute toxicity - aquatic plants	EC ₅₀ , 72 hours: 512 mg/l, <i>Scenedesmus subspicatus</i>
Acute toxicity - microorganisms	EC ₅₀ , 180 minutes: > 1000 mg/l, Activated sludge

(L) HEXYL CINNAMAL

Toxicity	Very toxic to aquatic life.
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Acute aquatic toxicity

LE(C)₅₀	0.1 < L(E)C ₅₀ ≤ 1
M factor (Acute)	1
Acute toxicity - fish	LC ₅₀ , 96 hours: 1.7 mg/l, OECD 203

LAUNDRY DETERGENT BIO

Acute toxicity - aquatic invertebrates EC₅₀, 48 hour: 0.247 mg/l, Daphnia magna

Chronic aquatic toxicity

Chronic toxicity - aquatic invertebrates EC₁₀, 21 day: 0.069 mg/l, Daphnia magna

SUBTILISIN

Toxicity Very toxic to aquatic life with long lasting effects.

Acute aquatic toxicity

LE(C)₅₀ 0.1 < L(E)C₅₀ ≤ 1

M factor (Acute) 1

Acute toxicity - fish LC₅₀, 96 hours: 8.2 mg/l, Fish
OECD 203

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 0.586 mg/l, Daphnia magna
OECD 202

Acute toxicity - aquatic plants EC₅₀, 72 hours: 0.83 mg/l, Algae
OECD 201

(L) BENZYL SALICYLATE

Toxicity Harmful to aquatic life.

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, 96 hour: 1.03 mg/kg, Fish
OECD 203

Acute toxicity - aquatic invertebrates EC₅₀, 48 hour: 2.25 mg/l, Daphnia magna
OECD 202

Acute toxicity - aquatic plants EC₅₀, 72 hour: 1.29 mg/l, Algae
OECD 201
Chronic, NOEC, 72 hour: 0.502 mg/l, Algae
OECD 201

AMYL SALICYLATE

Acute aquatic toxicity

LE(C)₅₀ 0.1 < L(E)C₅₀ ≤ 1

M factor (Acute) 1

Acute toxicity - fish LC₅₀, 96 hour: 1.34 mg/l, Fish

Chronic aquatic toxicity

M factor (Chronic) 1

1-(1,2,3,4,5,6,7,8 OCTAHYDRO2,3,8,8-TETRAMETHYL-2-NAPHTHYL)ETHAN-1-ONE

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, 96 hour: 1.3 mg/l, Fish
OECD 203

LAUNDRY DETERGENT BIO

Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hour: 1.4 mg/l, Daphnia magna OECD 202
Acute toxicity - aquatic plants	EC ₅₀ , 72 hour: 2.6 mg/l, Algae OECD 201
<u>Chronic aquatic toxicity</u>	
NOEC	0.01 < NOEC ≤ 0.1
Degradability	Non-rapidly degradable
M factor (Chronic)	1
Chronic toxicity - fish early life stage	Chronic, NOEC, 30 day: 0.16 mg/l, Fish OECD 210
Chronic toxicity - aquatic invertebrates	Chronic, NOEC, 21 day: 0.028 mg/l, Daphnia magna OECD 211

1,2-BENZISOTHIAZOL-3(2H)-ONE

<u>Acute aquatic toxicity</u>	
LE(C)₅₀	0.1 < L(E)C ₅₀ ≤ 1
M factor (Acute)	1
Acute toxicity - fish	LC ₅₀ , 96 hours: 2.15 mg/l, Oncorhynchus mykiss (Rainbow trout) OECD 203
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: 1.5 - 3.3 mg/l, Daphnia magna OECD 202
Acute toxicity - aquatic plants	IC ₅₀ , 72 hours: 0.11 mg/l, Pseudokirchneriella subcapitata OECD 201 NOEC, 72 hour: 0.0403 mg/l, Pseudokirchneriella subcapitata
Acute toxicity - microorganisms	EC ₅₀ , 3 hours: 12.8 mg/l, Activated sludge

HEXAMETHYLINDANOPYRAN

<u>Acute aquatic toxicity</u>	
LE(C)₅₀	0.1 < L(E)C ₅₀ ≤ 1
M factor (Acute)	1
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hour: 0.9 mg/l, Daphnia magna OECD 202
Acute toxicity - aquatic plants	IC ₅₀ , 72 hour: > 0.854 mg/l, Algae OECD 201
<u>Chronic aquatic toxicity</u>	
NOEC	0.01 < NOEC ≤ 0.1
Degradability	Non-rapidly degradable
M factor (Chronic)	1

HEXYL SALICYLATE

LAUNDRY DETERGENT BIO

Toxicity	Very toxic to aquatic life.
<u>Acute aquatic toxicity</u>	
LE(C)₅₀	0.1 < L(E)C ₅₀ ≤ 1
M factor (Acute)	1
Acute toxicity - fish	LC ₅₀ , 96 hour: 1.34 mg/l, Fish
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hour: 0.357 mg/l, Daphnia magna
Acute toxicity - aquatic plants	IC ₅₀ , 72 hour: 0.61 mg/l, Algae Chronic, NOEC, 72 hour: 0.15 mg/l, Algae
<u>Chronic aquatic toxicity</u>	
M factor (Chronic)	1

(L) BUTYLPHENYL METHYLPROPIONAL

<u>Acute aquatic toxicity</u>	
Acute toxicity - fish	LC ₅₀ , 96 hour: 2.04 mg/l, Fish
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hour: 10.7 mg/l, Daphnia magna
Acute toxicity - aquatic plants	IC ₅₀ , 72 hour: 29.16 mg/l, Algae

ALPHA ISOMETHYL IONONE

<u>Acute aquatic toxicity</u>	
Acute toxicity - fish	LC ₅₀ , 96 hours: 10.9 mg/l,
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: 9 mg/l, Daphnia magna
Acute toxicity - aquatic plants	IC ₅₀ , 72 hours: > 100 mg/l,

GERANIOL

<u>Acute aquatic toxicity</u>	
Acute toxicity - fish	LC ₅₀ , 96 hour: 14 - 22 mg/l, Fish OECD 203
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hour: 10.8 mg/l, Daphnia magna OECD 202
Acute toxicity - aquatic plants	IC ₅₀ , 72 hour: 13.1 mg/l, Algae OECD 201

DIHYDROGEN (ETHYL)[4-[4-[ETHYL(3-SULPHONATOBENZYL)]AMINO]-2'-SULPHONATOBENZHYDRYLIDENE]CYCLOHEXA-2,5-DIEN-1-YLIDENE](3-SULPHONATOBENZYL)AMMONIUM, DISODIUM SALT

Toxicity	Not considered toxic to fish.
<u>Acute aquatic toxicity</u>	

LAUNDRY DETERGENT BIO

Acute toxicity - fish	LC ₅₀ , 96 hours: > 220 - < 460 mg/l, Leuciscus idus (Golden orfe)
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: > 1000 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC ₅₀ , 7 days: > 200 mg/l, Algae EC10, 7 days: 12.5 mg/l, Algae
Acute toxicity - microorganisms	EC ₅₀ , 3 hours: > 1000 mg/l, Activated sludge OECD 209
<u>Chronic aquatic toxicity</u>	
Chronic toxicity - aquatic invertebrates	NOEC, 21 days: >=10 mg/l, Daphnia magna OECD 211

BENZOPHENONE

Toxicity	The product contains a substance which is very toxic to aquatic organisms.
<u>Acute aquatic toxicity</u>	
LE(C)₅₀	0.1 < L(E)C50 ≤ 1
M factor (Acute)	1
Acute toxicity - fish	LOEC, 96 hours: 9.24 mg/l, Pimephales promelas (Fat-head Minnow)
Acute toxicity - aquatic invertebrates	EC ₅₀ , 24 hours: 0.28 mg/l, Daphnia magna
<u>Chronic aquatic toxicity</u>	
NOEC	0.01 < NOEC ≤ 0.1
Degradability	Non-rapidly degradable
M factor (Chronic)	1
Chronic toxicity - fish early life stage	NOEC, 7.0 days: 5.86 mg/l, Pimephales promelas (Fat-head Minnow)

COUMARIN

<u>Acute aquatic toxicity</u>	
Acute toxicity - fish	LC ₅₀ , 96 hour: 56 mg/l, Fish

DISUBSTITUTED ALANINAMIDE

<u>Acute aquatic toxicity</u>	
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hour: > 88.4 mg/l, Daphnia magna OECD 202
Acute toxicity - aquatic plants	EyC50, 72 hour: > 100 mg/l, Algae OECD 201 NOEC, : > 100 mg/l, Algae OECD 201

PECTATE LYASE

<u>Acute aquatic toxicity</u>	
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LAUNDRY DETERGENT BIO

Acute toxicity - fish	LC ₅₀ , 96 hours: 58.3 - 326.7 mg/l, Fish OECD 203
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: 31.7 - 457 mg/l, Daphnia magna OECD 202
Acute toxicity - aquatic plants	EC ₅₀ , 72 hours: >=5.2 mg/l, Algae OECD 201

AMYLASE, alpha

Acute aquatic toxicity

Acute toxicity - fish	LC ₅₀ , 96 hours: 58.3 - 326.7 mg/l, Fish OECD 203
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: 31.7 - 457 mg/l, Daphnia magna OECD 202
Acute toxicity - aquatic plants	EC ₅₀ , 72 hours: >= 5.2 mg/l, Algae OECD 201

DODECANAL

Toxicity	Not considered toxic to fish.
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Acute aquatic toxicity

Acute toxicity - fish	LC ₅₀ , 96 hours: 2.6 mg/l, Fish OECD 203
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: > 0.48 mg/l, Daphnia magna OECD 202
Acute toxicity - aquatic plants	NOEC, 72 minutes: > 0.35 mg/l, Algae OECD 201

1,2-BENZISOTHIAZOL-3(2H)-ONE

Toxicity	Very toxic to aquatic life. Harmful to aquatic life with long lasting effects.
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Acute aquatic toxicity

LE(C)₅₀	0.1 < L(E)C ₅₀ ≤ 1
M factor (Acute)	1
Acute toxicity - fish	LC ₅₀ , 96 hours: 1.9 mg/l, Oncorhynchus mykiss (Rainbow trout)
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: 3.7 mg/l, Daphnia magna
Acute toxicity - aquatic plants	ErC ₅₀ , 72 hours: 0.8 mg/l, Pseudokirchneriella subcapitata NOEC, 72 hours: 0.21 mg/l, Pseudokirchneriella subcapitata ErC ₅₀ , 72 hours: 0.36 mg/l, Algae NOEC, 72 hours: 0.15 mg/l, Algae
Acute toxicity - microorganisms	EC ₅₀ , 3 hours: 28.52 mg/l, Activated sludge

5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE [EC NO. 247-500-7] & 2-METHYL-2H-ISOTHIAZOL-3-ONE [EC NO. 220-239-6] (3:1)

LAUNDRY DETERGENT BIO

Acute aquatic toxicity

LE(C) ₅₀	0.001 < L(E)C ₅₀ ≤ 0.01
M factor (Acute)	100
Acute toxicity - fish	LC ₅₀ , 96 hours: 0.19 mg/l, Oncorhynchus mykiss (Rainbow trout) NOEC, 36 day: 0.02 mg/l, Oncorhynchus mykiss (Rainbow trout)
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: 0.16 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC ₅₀ , 72 hours: 0.027 mg/l, Pseudokirchneriella subcapitata NOEC, 72 hour: 0.0014 mg/l, (Skeletonema costatum)
Acute toxicity - microorganisms	EC ₅₀ , 3 hour: 7.92 mg/l, Activated sludge

Chronic aquatic toxicity

NOEC	0.0001 < NOEC ≤ 0.001
Degradability	Non-rapidly degradable
M factor (Chronic)	100
Chronic toxicity - fish early life stage	NOEC, 14 days: 0.05 mg/l, Oncorhynchus mykiss (Rainbow trout)
Chronic toxicity - aquatic invertebrates	NOEC, 21 day: 0.10 mg/l, Daphnia magna

12.2. Persistence and degradability

Persistence and degradability There are no data on the degradability of this product.

Ecological information on ingredients.

BENZENESULPHONIC ACID MONO C10 - 13 ALKYL DERIVS SODIUM SALTS

Persistence and degradability	The substance is readily biodegradable.
Biodegradation	- Degradation (%) > 98%: 29 days OECD 301D

ALCOHOLS, C12-14, ETHOXYLATED, SULFATES, SODIUM SALTS

Persistence and degradability	The product is readily biodegradable.
Biodegradation	- Degradation (%) 100: 28 days

TRIETHANOLAMINE

Persistence and degradability	The substance is readily biodegradable.
Biodegradation	- Degradation 97: 28 days OECD 301A

(L) HEXYL CINNAMAL

LAUNDRY DETERGENT BIO

Persistence and degradability

The product is readily biodegradable.

Biodegradation

- Degradation 97%: 28 day
OECD 301F

SUBTILISIN**Persistence and degradability**

The substance is readily biodegradable.

(L) BENZYL SALICYLATE**Persistence and degradability**

The substance is readily biodegradable.

Biodegradation

- Degradation 93%: 28 day
OECD 301F

1-(1,2,3,4,5,6,7,8 OCTAHYDRO2,3,8,8-TETRAMETHYL-2-NAPHTHYL)ETHAN-1-ONE**Persistence and degradability**

The product is not readily biodegradable.

Biodegradation

- Degradation 11%: 28 days
OECD 301C

1,2-BENZISOTHIAZOL-3(2H)-ONE**Persistence and degradability**

The product is readily biodegradable.

Biodegradation

- Degradation 100%: 28 day
(OECD 301B)

HEXAMETHYLINDANOPYRAN**Persistence and degradability**

The product is not readily biodegradable.

HEXYL SALICYLATE**Persistence and degradability**

The product is readily biodegradable.

Biodegradation

- Degradation 91%: 28 days
OECD 301F

(L) BUTYLPHENYL METHYLPROPIONAL**Persistence and degradability**

The product is readily biodegradable.

Biodegradation

- Degradation 84%: 28 day
OECD 301F

ALPHA ISOMETHYL IONONE

LAUNDRY DETERGENT BIO

Persistence and degradability

Inherently biodegradable.

GERANIOL

Persistence and degradability

The product is readily biodegradable.

Biodegradation

- Degradation 90 - 100%: 28 day
OECD 301A
- Degradation 82%: 28 day
OECD 301D

DIHYDROGEN (ETHYL)[4-[4-[ETHYL(3-SULPHONATOBENZYL)]AMINO]-2'-SULPHONATOBENZHYDRYLIDENE]CYCLOHEXA-2,5-DIEN-1-YLIDENE](3-SULPHONATOBENZYL)AMMONIUM, DISODIUM SALT

Persistence and degradability

The product is not readily biodegradable.

BENZOPHENONE

Persistence and degradability

The product is not biodegradable.

COUMARIN

Persistence and degradability

The product is readily biodegradable.

DISUBSTITUTED ALANINAMIDE

Persistence and degradability

The product is readily biodegradable. OECD 301F

PECTATE LYASE

Persistence and degradability

The product is readily biodegradable.

AMYLASE, alpha

Persistence and degradability

The product is readily biodegradable. OECD 301

DODECANAL

Persistence and degradability

There are no data on the degradability of this product.

Biodegradation

- Degradation 73%: 28 days
OECD 301F

1,2-BENZISOTHIAZOL-3(2H)-ONE

LAUNDRY DETERGENT BIO

Persistence and degradability Not readily biodegradable.

Biodegradation - 24%: 28 days
OECD 301B

5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE [EC NO. 247-500-7] & 2-METHYL-2H-ISOTHIAZOL-3-ONE [EC NO. 220-239-6] (3:1)

Persistence and degradability The product is readily biodegradable.

Biodegradation - >60%: 28 days
OECD 301D

12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient No information available.

Ecological information on ingredients.

BENZENESULPHONIC ACID MONO C10 - 13 ALKYL DERIVS SODIUM SALTS

Bioaccumulative potential The product is not bioaccumulating.

Partition coefficient Log Koc: 3.4

ALCOHOLS, C12-14, ETHOXYLATED, SULFATES, SODIUM SALTS

Bioaccumulative potential The product does not contain any substances expected to be bioaccumulating.
BCF: < 3,

Partition coefficient log Pow: 0.3

TRIETHANOLAMINE

Bioaccumulative potential BCF: < 0.4, Cyprinus carpio (Common carp) OECD 305 C

Partition coefficient log Pow: -2.3

(L) HEXYL CINNAMAL

Bioaccumulative potential Potentially bioaccumulating.

Partition coefficient log Pow: 5.3

SUBTILISIN

Bioaccumulative potential The product is not bioaccumulating.

Partition coefficient log Pow: < 0

(L) BENZYL SALICYLATE

Bioaccumulative potential May accumulate in soil and water systems.

Partition coefficient log Pow: 4.3

LAUNDRY DETERGENT BIO

1-(1,2,3,4,5,6,7,8 OCTAHYDRO2,3,8,8-TETRAMETHYL-2-NAPHTHYL)ETHAN-1-ONE

Bioaccumulative potential Potentially bioaccumulating. BCF: 391,

Partition coefficient log Pow: 5.65

1,2-BENZISOTHIAZOL-3(2H)-ONE

Bioaccumulative potential BCF: 6.95,

Partition coefficient log Pow: 0.6 - 1.3

HEXAMETHYLINDANOPYRAN

Bioaccumulative potential BCF: 1584,

Partition coefficient log Pow: 5.3

HEXYL SALICYLATE

Bioaccumulative potential Potentially bioaccumulating.

Partition coefficient log Pow: 5.5

ALPHA ISOMETHYL IONONE

Bioaccumulative potential Potentially bioaccumulating.

Partition coefficient log Pow: 4.6

GERANIOL

Bioaccumulative potential Bioaccumulation is unlikely.

Partition coefficient log Pow: 2.6

DIHYDROGEN (ETHYL)[4-[4-[ETHYL(3-SULPHONATOBENZYL)]AMINO]-2'-SULPHONATOBENZHYDRYLIDENE]CYCLOHEXA-2,5-DIEN-1-YLIDENE](3-SULPHONATOBENZYL)AMMONIUM, DISODIUM SALT

Bioaccumulative potential The product does not contain any substances expected to be bioaccumulating.

Partition coefficient log Pow: ~ - 4

BENZOPHENONE

Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient log Pow: 3.18

DISUBSTITUTED ALANINAMIDE

Bioaccumulative potential The product is not bioaccumulating.

Partition coefficient log Pow: 1.8 OECD 107

PECTATE LYASE

Bioaccumulative potential The product is not bioaccumulating.

LAUNDRY DETERGENT BIO

Partition coefficient log Pow: <0

AMYLASE, alpha

Bioaccumulative potential The product is not bioaccumulating.

Partition coefficient log Pow: < 0

DODECANAL

Bioaccumulative potential BCF: 711,

Partition coefficient log Pow: 3.6

1,2-BENZISOTHIAZOL-3(2H)-ONE

Bioaccumulative potential Bioaccumulation is unlikely. BCF: 3.2, Fish Calculation method.

Partition coefficient log Pow: 1.17

5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE [EC NO. 247-500-7] & 2-METHYL-2H-ISOTHIAZOL-3-ONE [EC NO. 220-239-6] (3:1)

Bioaccumulative potential The product does not contain any substances expected to be bioaccumulating.

Partition coefficient log Pow: 0.486

12.4. Mobility in soil

Mobility Soluble in water.

Ecological information on ingredients.

BENZENESULPHONIC ACID MONO C10 - 13 ALKYL DERIVS SODIUM SALTS

Mobility No information available.

ALCOHOLS, C12-14, ETHOXYLATED, SULFATES, SODIUM SALTS

Mobility The product is soluble in water.

TRIETHANOLAMINE

Mobility The product is soluble in water.

Surface tension 48.8 mN/m @ 25°C

(L) HEXYL CINNAMAL

Mobility No information available.

(L) BENZYL SALICYLATE

Mobility No information available.

HEXYL SALICYLATE

Mobility No information available.

LAUNDRY DETERGENT BIO

DIHYDROGEN (ETHYL)[4-[4-[ETHYL(3-SULPHONATOBENZYL)]AMINO]-2'-SULPHONATOBENZHYDRYLIDENE]CYCLOHEXA-2,5-DIEN-1-YLIDENE](3-SULPHONATOBENZYL)AMMONIUM, DISODIUM SALT

Mobility The product is soluble in water.

BENZOPHENONE

Mobility Not determined.

DODECANAL

Mobility No information available.

1,2-BENZISOTHIAZOL-3(2H)-ONE

Mobility No information available.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

Ecological information on ingredients.

BENZENESULPHONIC ACID MONO C10 - 13 ALKYL DERIVS SODIUM SALTS

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

TRIETHANOLAMINE

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

(L) HEXYL CINNAMAL

Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

SUBTILISIN

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

(L) BENZYL SALICYLATE

Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

HEXYL SALICYLATE

Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

LAUNDRY DETERGENT BIO

DIHYDROGEN (ETHYL)[4-[4-[ETHYL(3-SULPHONATOBENZYL)]AMINO]-2'-SULPHONATOBENZHYDRYLIDENE]CYCLOHEXA-2,5-DIEN-1-YLIDENE](3-SULPHONATOBENZYL)AMMONIUM, DISODIUM SALT

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

BENZOPHENONE

Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

DODECANAL

Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

1,2-BENZISOTHIAZOL-3(2H)-ONE

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE [EC NO. 247-500-7] & 2-METHYL-2H -ISOTHIAZOL-3-ONE [EC NO. 220-239-6] (3:1)

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

12.6. Other adverse effects

Other adverse effects Not determined.

Ecological information on ingredients.

BENZENESULPHONIC ACID MONO C10 - 13 ALKYL DERIVS SODIUM SALTS

Other adverse effects No information available.

TRIETHANOLAMINE

Cod 0.25

Other adverse effects Not determined.

(L) HEXYL CINNAMAL

Other adverse effects None known.

(L) BENZYL SALICYLATE

Other adverse effects None known.

HEXYL SALICYLATE

Other adverse effects None known.

LAUNDRY DETERGENT BIO

DIHYDROGEN (ETHYL)[4-[4-[ETHYL(3-SULPHONATOBENZYL)]AMINO]-2'-SULPHONATOBENZHYDRYLIDENE]CYCLOHEXA-2,5-DIEN-1-YLIDENE](3-SULPHONATOBENZYL)AMMONIUM, DISODIUM SALT

Cod 933.1g/g

BENZOPHENONE

Other adverse effects Not determined.

DODECANAL

Other adverse effects None known.

1,2-BENZISOTHIAZOL-3(2H)-ONE

Other adverse effects No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information Do not puncture or incinerate, even when empty. Waste should be treated as controlled waste.

Disposal methods Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

SECTION 14: Transport information

General The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

14.1. UN number

Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

No transport warning sign required.

14.4. Packing group

Not applicable.

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant
No.

14.6. Special precautions for user

Not applicable.

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

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

LAUNDRY DETERGENT BIO

SECTION 15: Regulatory information

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

EU legislation

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended).
Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).
Commission Regulation (EU) No 2015/830 of 28 May 2015.

Restrictions (Annex XVII Regulation 1907/2006)

This product is/contains a substance that is included in REGULATION (EC) No 1907/2006 (REACH) ANNEX XVII - RESTRICTIONS ON THE MANUFACTURE, PLACING ON THE MARKET AND USE OF CERTAIN DANGEROUS SUBSTANCES, MIXTURES AND ARTICLES. Entry number: 3

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

LAUNDRY DETERGENT BIO

Abbreviations and acronyms used in the safety data sheet

ATE: Acute Toxicity Estimate.
 ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.
 ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways.
 CAS: Chemical Abstracts Service.
 DNEL: Derived No Effect Level.
 IATA: International Air Transport Association.
 IMDG: International Maritime Dangerous Goods.
 Kow: Octanol-water partition coefficient.
 LC₅₀: Lethal Concentration to 50 % of a test population.
 LD₅₀: Lethal Dose to 50% of a test population (Median Lethal Dose).
 PBT: Persistent, Bioaccumulative and Toxic substance.
 PNEC: Predicted No Effect Concentration.
 REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006.
 RID: European Agreement concerning the International Carriage of Dangerous Goods by Rail.
 vPvB: Very Persistent and Very Bioaccumulative.
 IARC: International Agency for Research on Cancer.
 MARPOL 73/78: International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978.
 cATpE: Converted Acute Toxicity Point Estimate.
 BCF: Bioconcentration Factor.
 BOD: Biochemical Oxygen Demand.
 EC₅₀: 50% of maximal Effective Concentration.
 LOAEC: Lowest Observed Adverse Effect Concentration.
 LOAEL: Lowest Observed Adverse Effect Level.
 NOAEC: No Observed Adverse Effect Concentration.
 NOAEL: No Observed Adverse Effect Level.
 NOEC: No Observed Effect Concentration.
 LOEC: Lowest Observed Effect Concentration.
 DMEL: Derived Minimal Effect Level.
 EL50: Exposure Limit 50
 hPa: Hectopascal
 LL50: Lethal Loading fifty
 OECD: Organisation for Economic Co-operation and Development
 POW: Octanol-water partition coefficient
 SCBA: self-contained breathing apparatus
 STP: Sewage Treatment Plant
 VOC: Volatile Organic Compounds

Classification abbreviations and acronyms

Acute Tox. = Acute toxicity
 Aquatic Acute = Hazardous to the aquatic environment (acute)
 Aquatic Chronic = Hazardous to the aquatic environment (chronic)

Key literature references and sources for data

Supplier's information.

Classification procedures according to Regulation (EC) 1272/2008

Skin Irrit. 2 - H315: Calculation method. Eye Dam. 1 - H318: Calculation method. EUH208: Calculation method.

Revision comments

NOTE: Lines within the margin indicate significant changes from the previous revision.

Revision date

05/10/2021

LAUNDRY DETERGENT BIO

Version number	1.000
SDS number	62887
SDS status	Approved.
Hazard statements in full	H302 Harmful if swallowed. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled. H335 May cause respiratory irritation. H400 Very toxic to aquatic life. H411 Toxic to aquatic life with long lasting effects. H412 Harmful to aquatic life with long lasting effects. EUH208 Contains 1,2-BENZISOTHAZOL-3(2H)-ONE. May produce an allergic reaction.
Signature	Jitendra Panchal

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.

Product Application Policy

To whom it may concern

Non-Supported Applications of Propylene Glycols (PGs)

For reasons of health and safety, regulatory compliance, and in accordance with internal policies **Univar Solutions**, will NOT supply Propylene Glycols (PGs) in a number of specific applications relating to pharmaceuticals, medicines, tobacco and tobacco products, marijuana products, food, feed, and dietary supplements. In order to maintain a high level of awareness amongst the customers, sales agents and distributors (including re-sellers and re-packagers) of **Univar Solutions**, we are writing to remind you of the non-supported applications for the Propylene Glycols (PGs). The use of such products is subject to the user's assessment of suitability, and compliance for its particular supplier-supported use. **Univar Solutions** will not support the applications listed in Annex 1 of this document.

Background

Based on a number of concerns and policies, including regulations to restrict product use, inappropriate exposure or contact and internal policies on specific application, **Univar Solutions** will not support Propylene Glycols (PGs) in the applications specified in Annex 1. We will not knowingly sample or sell these products for use in these non-supported applications, and will exit sales if necessary to support this position; however, we will make every effort to transition customers to appropriate products where possible.

General Non-Supported Applications

Product Scope:

All PG Products

The following identifies the applications that are generally, not supported by **Univar Solutions** for any Propylene Glycol (PG) product:

- Generation of artificial smoke/theatrical fogs/mists/artificial snow
- For use in the production of tobacco, the manufacture of tobacco products, the manufacture of electronic cigarettes or the manufacture of marijuana products
- Use as an active in pesticides¹
- Use as heat transfer fluids without inhibitors, including as an ingredient in fluids for warming or cooling foods or beverages or for heating an enclosed space where personnel exposure is possible²
- Manufacture of munitions or chemical weapons
- Ingredient in cat food

Notes

¹ **Univar Solutions** has not registered any PG product under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) for use as an active ingredient in pesticide formulas.

² Contact the **Univar Solutions** for properly inhibited PG-based fluids for heat transfer applications.

Univar Solutions does not provide samples of or knowingly sell any PG product for use in any General Non-Supported Application, unless otherwise agreed to in writing.

Technical or Industrial Grade Non-Supported Applications

Product Scope:

All Technical and Industrial PG grades, including, but not limited to:

- PG Industrial Grade (PGI)
- PG Technical Grade (PG TG)
- Dipropylene Glycol Regular Grade (DPG)
- Tripropylene Glycol Regular Grade (TPG)

- Tripropylene Glycol Acrylate Grade (TPG Ac)
- PG-Highers

The following identifies the applications that are NOT supported (“Technical or Industrial Grade Non-Supported Applications”) by **Univar Solutions** for any technical or industrial grade PG product:

- Any sensitive applications, including, but not limited to, pharmaceutical, direct and indirect food contact, cosmetics, personal care, animal feed, and children’s toys.
- All applications listed previously as General Non-Supported Applications

Univar Solutions does not provide samples of or knowingly sell any PG product for use in any Technical or Industrial Grade Non-Supported Application, unless otherwise agreed to in writing.

Specialty Grade Supported Applications

The following section identifies certain sensitive applications that are supported (“Specialty Grade Supported Applications”) by **Univar Solutions** for specialty grade products^{3,4}

Product Scope:

- Propylene Glycol USP/EP
- Propylene Glycol USP/EP (PG USP/EP)

is supported by **Univar Solutions** for the following applications:

- Pharmaceutical excipients⁵,
- direct and indirect food contact,
- beverage,
- cosmetics,
- personal care applications and children’s toys,
- animal feed (except cat food)⁶

Product Scope:

- Dipropylene Glycol LO+ Grade (DPG LO+)

is supported by **Univar Solutions** for the following applications:

- Indirect food contact,
- Cosmetics/personal care and
- Children’s toys

Product Scope:

- Propylene Glycol Animal Feed (PG AF)

is supported by **Univar Solutions** for the following applications

- Animal feed (except cat food)⁶

Notes

³ Re-packaging any specialty grade PG product for re-sale requires prior written approval by **Univar Solutions**.

⁴ Specialty grade PG product names may vary by region.

⁵ **Univar Solutions** does not test any PG USP/EP product for suitability in human parenteral applications (i.e., applications intended for humans where the drug formulation is administered not through the gastrointestinal tract, but is typically administered as an injection or infusion) and, therefore, does not support sales into these applications, unless otherwise agreed to in writing. **Univar Solutions** does not apply Active Pharmaceutical Ingredient (“API”) Good Manufacturing Practice (GMP) and, therefore, does not support the use of any PG USP/EP product as an API, unless otherwise agreed to in writing.

⁶ Where PG AG is not available, PG USP/EP is the PG product supported for animal feed (except cat food).

In the event that a customer is using a PG product that is contrary to the information provided above, **Univar Solutions** reserves the right to exit product sales to that customer.

Univar Solutions strongly encourage their customers to review both their manufacturing processes and their applications of the aforementioned PG products from the standpoint of human health and environmental quality to ensure that such products are used only in applications for which they are intended or tested. To enter into new applications beyond the traditional standard use applications, contact your **Univar Solutions** representative to review the specific application with our supplier. As use conditions and applicable laws may differ from one location to another and may change with time, when **Univar Solutions** supports an application, **Univar Solutions** does not warrant and is not responsible for the use in such application.

Please note **Univar Solutions** warrants that the products supplied meet the agreed specification but does not offer warranties as to fitness for purpose. You, as a user, must rely on your own testing in order to ascertain fitness for your intended purpose. Should you have any questions or require further information, please contact your **Univar Solutions** representative.

Whilst this policy is distributed with the SDS, it is to be considered as a separate document.

Yours sincerely,
Univar Solutions
Product Stewardship