



SAFETY DATA SHEET CAFLON HDL/BIO

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

1.1. Product identifier

Product name CAFLON HDL/BIO

Product number 60838

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

Identified uses Detergent.

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. 60838

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Not Classified

Health hazards Eye Dam. 1 - H318

Environmental hazards Not Classified

2.2. Label elements

Hazard pictograms



Signal word Danger

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

Precautionary statements P280 Wear protective gloves/ protective clothing/ eye protection/ 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.

CAFLON HDL/BIO**Contains**

BENZENESULFONIC ACID, 4-C10-13-SEC-ALKYL DERIVS., COMPDS. WITH
TRIETHANOLAMINE, C13-15 ALCOHOL ETHOXYLATE 7EO, COCO DIETHEANOLAMIDE

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**

BENZENESULFONIC ACID, 4-C10-13-SEC-ALKYL DERIVS., COMPDS. WITH TRIETHANOLAMINE			1-5%
CAS number: —	EC number: 939-464-2	REACH registration number: 01-2119971970-28-XXXX	
Classification Skin Corr. 1C - H314 Eye Dam. 1 - H318 Aquatic Chronic 3 - H412			
C13-15 ALCOHOL ETHOXYLATE 7EO			1-5%
CAS number: 157627-86-6			
Classification Acute Tox. 4 - H302 Eye Dam. 1 - H318 Aquatic Chronic 3 - H412			
COCO DIETHEANOLAMIDE			1-5%
CAS number: —	EC number: 931-329-6	REACH registration number: 01-2119490100-53-XXXX	
Classification Skin Irrit. 2 - H315 Eye Dam. 1 - H318 Aquatic Chronic 2 - H411			
GLYCERINE			1-5%
CAS number: 56-81-5	EC number: 200-289-5		
Classification Not Classified			

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ALCOHOLS, C12-14, ETHOXYLATED, SULFATES, SODIUM SALTS			<1%
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			
FATTY ACIDS, COCO POTASSIUM SALTS			<1%
CAS number: 61789-30-8	EC number: 263-049-9		
Classification Skin Irrit. 2 - H315 Eye Irrit. 2 - H319			
TETRASODIUM (1-HYDROXYETHYLIDENE)BISPHOSPHONATE			<1%
CAS number: 3794-83-0	EC number: 223-267-7	REACH registration number: 01-2119510382-52-XXXX	
Classification Acute Tox. 4 - H302 Eye Irrit. 2 - H319			
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			

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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			
(L) HEXYL CINNAMAL			<0.1%
CAS number: 101-86-0	EC number: 202-983-3	REACH registration number: 01-2119533092-50-XXXX	
M factor (Acute) = 1			
Classification Skin Sens. 1 - H317 Aquatic Acute 1 - H400 Aquatic Chronic 2 - H411			
(L) BENZYL SALICYLATE			<0.1%
CAS number: 118-58-1	EC number: 204-262-9	REACH registration number: 01-2119969442-31-XXXX	
Classification Eye Irrit. 2 - H319 Skin Sens. 1 - H317 Aquatic Chronic 3 - H412			
AMYL SALICYLATE			<0.1%
CAS number: 2050-08-0	EC number: 218-080-2	REACH registration number: 01-2119969444-27-XXXX	
M factor (Acute) = 1	M factor (Chronic) = 1		
Classification Acute Tox. 4 - H302 STOT SE 2 - H371 Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410			

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1-(1,2,3,4,5,6,7,8 OCTAHYDRO2,3,8,8-TETRAMETHYL-2-NAPHTHYL)ETHAN-1-ONE			<0.1%
CAS number: 54464-57-2	EC number: 259-174-3	REACH registration number: 01-2119489989-04-XXXX	
M factor (Chronic) = 1			
Classification Skin Irrit. 2 - H315 Skin Sens. 1B - H317 Aquatic Chronic 1 - H410			

HEXAMETHYLINDANOPYRAN			<0.1%
CAS number: 1222-05-5	EC number: 214-946-9	REACH registration number: 01-2119488227-29-XXXX	
M factor (Acute) = 1	M factor (Chronic) = 1		
Classification Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410			

SODIUM HYDROXIDE			<0.1%
CAS number: 1310-73-2	EC number: 215-185-5	REACH registration number: 01-2119457892-27-XXXX	
Classification Met. Corr. 1 - H290 Skin Corr. 1A - H314 Eye Dam. 1 - H318			

HEXYL SALICYLATE			<0.1%
CAS number: 6259-76-3	EC number: 228-408-6	REACH registration number: 01-2119638275-36-XXXX	
M factor (Acute) = 1	M factor (Chronic) = 1		
Classification Skin Irrit. 2 - H315 Skin Sens. 1 - H317 Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410			

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(L) BUTYLPHENYL METHYLPROPIONAL			<0.1%
CAS number: 80-54-6	EC number: 201-289-8	REACH registration number: 01-2119485965-18-XXXX	
Classification Acute Tox. 4 - H302 Skin Irrit. 2 - H315 Skin Sens. 1 - H317 Repr. 2 - H361f Aquatic Chronic 2 - H411			

ALPHA ISOMETHYL IONONE			<0.1%
CAS number: 127-51-5	EC number: 204-846-3		
Classification Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Skin Sens. 1 - H317 Aquatic Chronic 2 - H411			

GERANIOL			<0.1%
CAS number: 106-24-1	EC number: 203-377-1	REACH registration number: 01-2119552430-49-XXXX	
Classification Skin Irrit. 2 - H315 Eye Dam. 1 - H318 Skin Sens. 1 - H317			

BENZOPHENONE			<0.1%
CAS number: 119-61-9	EC number: 204-337-6		
M factor (Acute) = 1	M factor (Chronic) = 1		
Classification Carc. 2 - H351 Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410			

2-TERT-BUTYLCYCLOHEXYL ACETATE			<0.1%
CAS number: 88-41-5	EC number: 201-828-7	REACH registration number: 01-2119970713-33-XXXX	
Classification Aquatic Chronic 2 - H411			

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METHYL CEDRYL KETONE			<0.1%
CAS number: 32388-55-9	EC number: 251-020-3		
M factor (Acute) = 1	M factor (Chronic) = 1		
Classification Skin Sens. 1B - H317 Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410			

COUMARIN			<0.1%
CAS number: 91-64-5	EC number: 202-086-7	REACH registration number: 01-2119949300-45-XXXX	
Classification Acute Tox. 4 - H302 Skin Sens. 1 - H317			

DISUBSTITUTED ALANINAMIDE			<0.1%
CAS number: 1189108-44-8	REACH registration number: 01-2119984321-38-XXXX		
Classification Skin Sens. 1B - H317			

PECTATE LYASE			<0.1%
CAS number: 9015-75-2	EC number: 232-766-9	REACH registration number: 01-2120764181-59-XXXX	
Classification Resp. Sens. 1 - H334			

AMYLASE, alpha			<0.1%
CAS number: 9000-90-2	EC number: 232-565-6	REACH registration number: 01-2119938627-26-XXXX	
Classification Resp. Sens. 1 - H334			

DIPHENYL OXIDE			<0.1%
CAS number: 101-84-8	EC number: 202-981-2		
Classification Eye Irrit. 2 - H319 Aquatic Chronic 2 - H411			

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POLYETHYLENE GLYCOL STEARYL ETHER			<0.1%
CAS number: 9005-00-9	EC number: 500-017-8	REACH registration number: 01-2119977092-34-XXXX	
M factor (Acute) = 1			
Classification Eye Dam. 1 - H318 Aquatic Acute 1 - H400 Aquatic Chronic 2 - H411			

DODECANAL			<0.1%
CAS number: 112-54-9	EC number: 203-983-6	REACH registration number: 01-2119969441-33-XXXX	
Classification Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Skin Sens. 1B - H317			

BETA IONONE			<0.1%
CAS number: 14901-07-6	EC number: 238-969-9		
Classification Aquatic Chronic 2 - H411			

UNDECYLENAL			<0.1%
CAS number: 112-45-8	EC number: 203-973-1		
Classification 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 3 - H412			

CAFLON HDL/BIO

XX REACTION MASS OF: 5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE [EC NO. 247-500-7] AND 2-METHYL-2H-ISOTHIAZOL-3-ONE XX [EC NO. 220-239-6] (3:1) **<0.1%**

CAS number: 55965-84-9

EC number: 611-341-5

M factor (Acute) = 100

M factor (Chronic) = 100

Classification

Acute Tox. 3 - H301

Acute Tox. 2 - H310

Acute Tox. 2 - H330

Skin Corr. 1B - H314

Eye Dam. 1 - H318

Skin Sens. 1A - H317

Aquatic Acute 1 - H400

Aquatic Chronic 1 - H410

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	Move affected person to fresh air at once. Get medical attention if any discomfort continues.
Ingestion	Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Rinse mouth thoroughly with water. Give plenty of water to drink. Get medical attention if any discomfort continues.
Skin contact	Remove contaminated clothing immediately and wash skin 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 if any discomfort continues.

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

Skin contact	May cause an allergic skin reaction.
Eye contact	Causes serious eye damage. May cause permanent damage if eye is not immediately irrigated.

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

Notes for the doctor Treat symptomatically.

SECTION 5: Firefighting measures**5.1. Extinguishing media**

Suitable extinguishing media	Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog.
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

CAFLON HDL/BIO

Hazardous combustion products Thermal decomposition or combustion products may include the following substances: Carbon dioxide (CO₂). Carbon monoxide (CO). Sulphurous gases (SO_x). Ammonia or amines. Nitrous gases (NO_x).

5.3. Advice for firefighters

Special protective equipment for firefighters Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Wear protective clothing as described in Section 8 of this safety data sheet. Avoid inhalation of vapours and contact with skin and eyes.

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 Stop leak if possible without risk. Absorb spillage with non-combustible, absorbent material. Collect spillage in containers, seal securely and deliver for disposal according to local regulations.

6.4. Reference to other sections

Reference to other sections Wear protective clothing as described in Section 8 of this safety data sheet.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Avoid spilling. Avoid inhalation of vapours/spray and contact with skin and eyes. Avoid the formation of mists.

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

GLYCERINE

Long-term exposure limit (8-hour TWA): WEL 10 mg/m³ mist

SUBTILISIN

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

SODIUM HYDROXIDE

Short-term exposure limit (15-minute): WEL 2 mg/m³

DIPHENYL OXIDE

Long-term exposure limit (8-hour TWA): WEL 1 ppm 7,1 mg/m³
Short-term exposure limit (15-minute): WEL

WEL = Workplace Exposure Limit.

Sen = Capable of causing occupational asthma.

CAFLON HDL/BIO**Ingredient comments**

WEL = Workplace Exposure Limits

BENZENESULFONIC ACID, 4-C10-13-SEC-ALKYL DERIVS., COMPS. WITH TRIETHANOLAMINE

DNEL	Industry - Inhalation; Long term systemic effects: 4.1 mg/m ³ Industry - Dermal; Long term systemic effects: 5.29 mg/kg/day Consumer - Inhalation; Long term systemic effects: 1.01 mg/m ³ Consumer - Dermal; Long term systemic effects: 1.2 mg/kg/day
PNEC	- Fresh water; 0.268 mg/l - marine water; 0.0268 mg/l - Intermittent release; 0.268 mg/l - STP; 7 mg/l - Sediment (Freshwater); 8.1 mg/kg - Sediment (Marinewater); 8.1 mg/kg - Soil; 35 mg/kg

C13-15 ALCOHOL ETHOXYLATE 7EO (CAS: 157627-86-6)

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

DNEL	Industry - Dermal; Long term systemic effects: 4.16 Industry - Dermal; Long term local effects: 0.09 Industry - Inhalation; Long term systemic effects: 73.4 mg/m ³ Consumer - Inhalation; Long term systemic effects: 21.7 mg/m ³ Consumer - Dermal; Long term local effects: 0.056 Consumer - Oral; Long term systemic effects: 6.25
PNEC	- Fresh water; 0.007 mg/l - marine water; 0.0007 mg/l - Intermittent release; 0.024 mg/l - Sediment; 0.0424 mg/kg - Soil; 0.0189 mg/kg - STP; 830 mg/l

GLYCERINE (CAS: 56-81-5)

Ingredient comments	WEL = Workplace Exposure Limits
DNEL	Industry - Inhalation; Long term local effects: 56 mg/m ³ General population - Inhalation; Long term local effects: 33 mg/m ³ General population - Oral; Long term systemic effects: 229 mg/kg/day
PNEC	- Fresh water; 0.885 mg/l - marine water; 0.0885 mg/l - Intermittent release; 8.85 mg/l - STP; 1000 mg/l - Soil; 0.141 mg/kg - Sediment (Freshwater); 3.3 mg/kg - Sediment (Marinewater); 0.33 mg/kg

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

CAFLON HDL/BIO

DNEL	Workers - Dermal; Long term systemic effects: 2750 mg/kg/day Workers - Inhalation; Long term systemic effects: 175 mg/m³ General population - Dermal; Long term systemic effects: 1650 mg/kg/day General population - Oral; Long term systemic effects: 15 mg/kg/day General population - Inhalation; Long term systemic effects: 52 mg/m³ Workers - Dermal; Long term local effects: 0.132 mg/cm² General population - Dermal; Long term local effects: 0.079 mg/cm²
PNEC	- Fresh water; 0.24 mg/l - Soil; 1.5 mg/kg - STP; 10000 mg/l - marine water; 0.024 mg/l - Intermittent release; 0.071 mg/l - Sediment (Freshwater); 0.9168 mg/kg - Sediment (Marinewater); 0.09168 mg/kg

TETRASODIUM (1-HYDROXYETHYLIDENE)BISPHOSPHONATE (CAS: 3794-83-0)

Ingredient comments	No exposure limits known for ingredient(s).
DNEL	Industry - Oral; Long term systemic effects: 13 mg/kg/day Consumer - Oral; Long term systemic effects: 6.5 mg/kg/day
PNEC	- Fresh water; 0.136 mg/l - STP; 20 mg/l - Soil; 96 mg/kg - marine water; 0.136 mg/l

SUBTILISIN (CAS: 9014-01-1)

DNEL	Workers - Dermal; Short term local effects: 0.2 %
DMEL	Workers - Inhalation; Long term local effects: 60 ng/m³ Professional, Consumer - Inhalation; Long term local effects: 15 ng/m³
PNEC	- Fresh water; 0.06 µg/l - marine water; 0.006 µg/l - STP; 65000 µg/l

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

DNEL	Workers - Inhalation; Long term systemic effects: 0.078 mg/m³ Workers - Inhalation; Short term local effects: 6.28 mg/m³ Workers - Dermal; Long term systemic effects: 18.2 mg/kg Workers - Dermal; Long term local effects: 0.525 mg/cm² Consumer - Inhalation; Long term systemic effects: 0.019 mg/m³ Consumer - Inhalation; Short term local effects: 4.71 mg/m³ Consumer - Dermal; Long term systemic effects: 9.11 mg/kg Consumer - Dermal; Long term local effects: 0.0787 mg/cm² Consumer - Dermal; Short term local effects: 0.0787 mg/cm² Consumer - Oral; Long term systemic effects: 0.056 mg/kg/day
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CAFLON HDL/BIO**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

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

SODIUM HYDROXIDE (CAS: 1310-73-2)**DNEL**

- Consumer - Inhalation; Long term local effects: 1 mg/m³
- Workers - Dermal; Short term local effects: 2 mg/kg/day
- Workers - Inhalation; Short term local effects: 2 mg/m³
- Workers - Inhalation; Long term local effects: 1 mg/m³

(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)**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

CAFLON HDL/BIO**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

BENZOPHENONE (CAS: 119-61-9)**Ingredient comments**

No exposure limits known for ingredient(s).

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

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

POLYETHYLENE GLYCOL STEARYL ETHER (CAS: 9005-00-9)**DNEL**

Workers - Inhalation; Long term systemic effects: 294 mg/m³
 Workers - Dermal; Long term systemic effects: 2080 mg/kg/day
 Consumer - Inhalation; Long term systemic effects: 87 mg/m³
 Consumer - Dermal; Long term systemic effects: 1250 mg/kg/day
 Consumer - Oral; Long term systemic effects: 25 mg/kg/day

PNEC

- Fresh water; 0.0019 mg/l
 - marine water; 0.0019 mg/l
 - Intermittent release; 0.0032 mg/l
 - STP; 1.4 mg/l
 - Sediment (Freshwater); 81.1 mg/kg
 - Sediment (Marinewater); 81.1 mg/kg
 - Soil; 1 mg/kg

BETA IONONE (CAS: 14901-07-6)**Ingredient comments**

No exposure limits known for ingredient(s).

CAFLON HDL/BIO

DNEL

Consumer - Inhalation; Long term systemic effects: 3.1 mg/m³
 Workers - Inhalation; Long term systemic effects: 12.7 mg/m³
 Consumer - Dermal; Long term systemic effects: 3.6 mg/kg
 Workers - Dermal; Long term systemic effects: 6 mg/kg
 Consumer - Oral; Long term : 1.8 mg/kg

PNEC

- Fresh water; 0.07 mg/l
- marine water; 0.007 mg/l
- STP; 9 mg/l
- Sediment (Freshwater); 0.0616 mg/l
- Sediment (Marinewater); 0.00616 mg/kg
- Soil; 0.0156 mg/kg

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

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

DNEL

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

PNEC

- Fresh water; 3.39 µg/l
- marine water; 3.39 µg/l
- Intermittent release; 3.39 µg/l
- Sediment (Freshwater); 0.027 mg/kg
- Sediment (Marinewater); 0.027 mg/kg
- Soil; 0.01 mg/kg
- STP; 0.23 mg/l

8.2. Exposure controls

Protective equipment



Appropriate engineering controls

Provide adequate ventilation. Observe any occupational exposure limits for the product or ingredients. Avoid the formation of mists.

Eye/face protection

Chemical splash goggles or face shield. Personal protective equipment for eye and face protection should comply with European Standard EN166.

CAFLON HDL/BIO

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. Nitrile rubber. To protect hands from chemicals, gloves should comply with European Standard EN374.
Other skin and body protection	Wear appropriate clothing to prevent any possibility of skin contact.
Hygiene measures	Do not smoke in work area. Wash at the end of each work shift and before eating, smoking and using the toilet. Wash promptly if skin becomes contaminated. Promptly remove any clothing that becomes contaminated. Use appropriate skin cream to prevent drying of skin.
Respiratory protection	Respiratory protection must be used if the airborne contamination exceeds the recommended occupational exposure limit. EN 136/140/141/145/143/149

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Liquid.
Colour	Blue.
Odour	Characteristic.
Odour threshold	No information available.
pH	pH (concentrated solution): 8.70
Melting point	Not determined.
Initial boiling point and range	No information available.
Flash point	Not determined.
Evaporation rate	Not applicable.
Evaporation factor	No information available.
Flammability (solid, gas)	No information available.
Upper/lower flammability or explosive limits	Data lacking.
Other flammability	No information available.
Vapour pressure	Data lacking.
Vapour density	Not applicable.
Relative density	1.045 @ 20°C
Bulk density	No information available.
Solubility(ies)	Soluble in water.
Partition coefficient	Not determined.
Auto-ignition temperature	Not determined.
Decomposition Temperature	Not determined.
Viscosity	No information available.
Explosive properties	Data lacking.

CAFLON HDL/BIO

Explosive under the influence of a flame No information available.

Oxidising properties Data lacking.

9.2. Other information

Other information No information required.

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.

10.2. Chemical stability

Stability Stable at normal ambient temperatures and when used as recommended.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions Not determined.

10.4. Conditions to avoid

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

10.5. Incompatible materials

Materials to avoid Strong oxidising agents. Strong reducing agents.

10.6. Hazardous decomposition products

Hazardous decomposition products Thermal decomposition or combustion products may include the following substances: Oxides of the following substances: Carbon. Nitrogen. Sulphur. Ammonia or amines.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

ATE oral (mg/kg) 19,841.27

Skin corrosion/irritation

Skin corrosion/irritation No information available.

Serious eye damage/irritation

Serious eye damage/irritation Causes serious eye damage.

Respiratory sensitisation

Respiratory sensitisation No information available.

Skin sensitisation

CAFLON HDL/BIO

Skin sensitisation	May cause an allergic skin reaction.
<u>Germ cell mutagenicity</u>	
Genotoxicity - in vitro	Data lacking.
<u>Carcinogenicity</u>	
Carcinogenicity	Data lacking.
<u>Reproductive toxicity</u>	
Reproductive toxicity - fertility	Data lacking.
<u>Specific target organ toxicity - single exposure</u>	
STOT - single exposure	Data lacking.
<u>Specific target organ toxicity - repeated exposure</u>	
STOT - repeated exposure	Data lacking.
<u>Aspiration hazard</u>	
Aspiration hazard	No information available.
<u>Inhalation</u>	
Inhalation	Gas or vapour in high concentrations may irritate the respiratory system.
<u>Ingestion</u>	
Ingestion	May cause stomach pain or vomiting.
<u>Skin contact</u>	
Skin contact	Slightly irritating. May cause an allergic skin reaction.
<u>Eye contact</u>	
Eye contact	Causes serious eye damage.

Toxicological information on ingredients.**BENZENESULFONIC ACID, 4-C10-13-SEC-ALKYL DERIVS., COMPS. WITH TRIETHANOLAMINE****Acute toxicity - oral**

Acute toxicity oral (LD₅₀) 2,925.0
mg/kg)

Species Rat

Acute toxicity - dermal

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

Species Rabbit

Skin corrosion/irritation

Skin corrosion/irritation Causes severe burns.

Animal data Irritating.

Serious eye damage/irritation

Serious eye
damage/irritation No information available.

Skin sensitisation

Skin sensitisation Buehler test: - Guinea pig: OECD 406 Not sensitising.

Germ cell mutagenicity

Genotoxicity - in vitro Bacterial reverse mutation test:

CAFLON HDL/BIO

Carcinogenicity

Carcinogenicity Scientifically unjustified.

Reproductive toxicity

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 Not classified as a specific target organ toxicant after repeated exposure.

C13-15 ALCOHOL ETHOXYLATE 7EO

Acute toxicity - oral

ATE oral (mg/kg) 500.0

Skin corrosion/irritation

Skin corrosion/irritation No information available.

Serious eye damage/irritation

Serious eye damage/irritation Causes serious eye damage.

Respiratory sensitisation

Respiratory sensitisation No information available.

Skin sensitisation

Skin sensitisation Data lacking.

Germ cell mutagenicity

Genotoxicity - in vitro Data lacking.

Carcinogenicity

Carcinogenicity Data lacking.

Reproductive toxicity

Reproductive toxicity - fertility Data lacking.

Specific target organ toxicity - single exposure

STOT - single exposure Data lacking.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure Data lacking.

Aspiration hazard

Aspiration hazard No information available.

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

Ingestion Harmful if swallowed.

Skin contact May cause defatting of the skin but is not an irritant.

CAFLON HDL/BIO

Eye contact Causes serious eye damage.

COCO DIETHEANOLAMIDE**Acute toxicity - oral**

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

Acute toxicity - dermal

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

Skin corrosion/irritation

Animal data Moderately irritating. Rabbit

Serious eye damage/irritation

Serious eye damage/irritation Severely irritating to skin. Rabbit

Skin sensitisation

Skin sensitisation Not sensitising. Guinea pig

Germ cell mutagenicity

Genotoxicity - in vitro Bacterial reverse mutation test: Negative.

ALCOHOLS, C12-14, ETHOXYLATED, SULFATES, SODIUM SALTS**Acute toxicity - oral**

Acute toxicity oral (LD₅₀ mg/kg) 4,100.0

Species Rat

ATE oral (mg/kg) 4,100.0

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 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

CAFLON HDL/BIO

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.

TETRASODIUM (1-HYDROXYETHYLIDENE)BISPHOSPHONATE

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 940.0

Species Rat

Notes (oral LD₅₀) Harmful if swallowed.
LD₅₀ 940 mg/kg, Oral, Rat OECD 401

ATE oral (mg/kg) 940.0

Acute toxicity - dermal

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

Species Rabbit

Notes (dermal LD₅₀) LD₅₀ > 2000 mg/kg, Dermal, Rabbit, Male, Female OECD 402

Acute toxicity - inhalation

Notes (inhalation LC₅₀) No specific test data are available.

Skin corrosion/irritation

Skin corrosion/irritation Not irritating. Rabbit Erythema/eschar score: < 1 OECD 404

Serious eye damage/irritation

Serious eye damage/irritation Causes serious eye irritation. Rabbit OECD 405

Respiratory sensitisation

Respiratory sensitisation Conclusive data but not sufficient for classification.

Skin sensitisation

Skin sensitisation Conclusive data but not sufficient for classification.

Germ cell mutagenicity

Genotoxicity - in vitro This substance has no evidence of mutagenic properties.
Bacterial reverse mutation test: Negative. Gene mutation: Negative.

CAFLON HDL/BIO

Genotoxicity - in vivo No information available.

Carcinogenicity

Carcinogenicity Conclusive data but not sufficient for classification.

Reproductive toxicity

Reproductive toxicity - fertility Conclusive data but not sufficient for classification.

Reproductive toxicity - development Conclusive data but not sufficient for classification.

Specific target organ toxicity - single exposure

STOT - single exposure No information available.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure NOAEL 19 - 24 mg/kg, Oral, Rat

Aspiration hazard

Aspiration hazard Not applicable.

Inhalation When heated, vapours/gases hazardous to health may be formed. Effects may be delayed. Keep affected person under observation. Prolonged or repeated exposure to vapours in high concentrations may cause the following adverse effects: Respiratory system irritation. Coughing.

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

Skin contact Skin irritation should not occur when used as recommended.

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

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

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

CAFLON HDL/BIO

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

Specific target organ toxicity - single exposure

STOT - single exposure May cause respiratory irritation.

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.

(L) HEXYL CINNAMAL

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 3,100.0

Species Rat

Notes (oral LD₅₀) LD₅₀ 3100 mg/kg, Oral, Rat

ATE oral (mg/kg) 3,100.0

Acute toxicity - dermal

Notes (dermal LD₅₀) LD₅₀ > 3000 mg/kg, Dermal, Rabbit

Skin corrosion/irritation

CAFLON HDL/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.

(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

CAFLON HDL/BIO

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.

Germ cell mutagenicity

Genotoxicity - in vitro Bacterial reverse mutation test: 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 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.

CAFLON HDL/BIO**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

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.

HEXAMETHYLINDANOPYRAN**Acute toxicity - oral**

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

Species Rat

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

CAFLON HDL/BIO

ATE oral (mg/kg) 4,640.0

Acute toxicity - dermal

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

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.

SODIUM HYDROXIDE**Acute toxicity - oral**

Notes (oral LD₅₀) LD₅₀ >500 mg/kg, Oral, Rabbit

Acute toxicity - dermal

Notes (dermal LD₅₀) No specific test data are available.

Acute toxicity - inhalation

Notes (inhalation LC₅₀) No specific test data are available.

Skin corrosion/irritation

Skin corrosion/irritation Causes severe burns.

Serious eye damage/irritation

Serious eye damage/irritation Causes serious eye damage.

Respiratory sensitisation

Respiratory sensitisation No information available.

Skin sensitisation

Skin sensitisation No information available.

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

CAFLON HDL/BIO

Aspiration hazard	No information available.
Inhalation	Dust is severely irritating to the upper respiratory system. Symptoms following overexposure may include the following: Coughing. Wheezing/breathing difficulties. May cause an asthma-like shortness of breath. Sore throat. Burning sensation in mouth. Upper respiratory irritation. Tracheobronchitis, pulmonary oedema.
Ingestion	Causes severe burns. May cause burns in mucous membranes, throat, oesophagus and stomach. Symptoms following overexposure may include the following: Chemical burns. Burning sensation in mouth. Nausea, vomiting. Vomiting of blood. Swallowing concentrated chemical may cause severe internal injury.
Skin contact	Causes severe burns. Blistering may occur. May cause serious chemical burns to the skin. Prolonged contact causes serious tissue damage.
Eye contact	Causes serious eye damage. May cause chemical eye burns. Symptoms following overexposure may include the following: Severe irritation, burning and tearing. Corneal damage. May cause permanent damage if eye is not immediately irrigated.

HEXYL SALICYLATE**Acute toxicity - oral**

Acute toxicity oral (LD ₅₀ mg/kg)	5,001.0
Species	Rat
Notes (oral LD ₅₀)	LD ₅₀ > 5000 mg/kg, Oral, Rat
ATE oral (mg/kg)	5,001.0

Acute toxicity - dermal

Acute toxicity dermal (LD ₅₀ mg/kg)	5,001.0
Species	Rabbit
Notes (dermal LD ₅₀)	LD ₅₀ > 5000 mg/kg, Dermal, Rabbit
ATE dermal (mg/kg)	5,001.0

Skin corrosion/irritation

Skin corrosion/irritation	Irritating to skin. Rabbit
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Serious eye damage/irritation

Serious eye damage/irritation	Causes serious eye irritation.
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Respiratory sensitisation

Respiratory sensitisation	No information available.
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Skin sensitisation

Skin sensitisation	May cause an allergic skin reaction.
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Germ cell mutagenicity

Genotoxicity - in vitro	Bacterial reverse mutation test: Negative.
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Carcinogenicity

CAFLON HDL/BIO

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

Acute toxicity - dermal

CAFLON HDL/BIO

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.

BENZOPHENONE**Acute toxicity - oral**

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

Species Rat

ATE oral (mg/kg) 10,000.0

Acute toxicity - dermal

CAFLON HDL/BIO

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

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.

2-TERT-BUTYLCYCLOHEXYL ACETATE**Acute toxicity - oral**

Acute toxicity oral (LD₅₀ 4,600.0 mg/kg)

Species Rat

Notes (oral LD₅₀) LD₅₀ 4600 mg/kg, Oral, Rat

ATE oral (mg/kg) 4,600.0

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

METHYL CEDRYL KETONE**Acute toxicity - oral**

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

Acute toxicity - dermal

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

Inhalation Irritating to respiratory system.

Ingestion Gastrointestinal symptoms, including upset stomach.

Skin contact Irritating to skin.

Eye contact Irritating to eyes.

COUMARIN**Acute toxicity - oral**

CAFLON HDL/BIO

Acute toxicity oral (LD ₅₀ mg/kg)	500.0
Species	Rat
Notes (oral LD ₅₀)	LD ₅₀ 500 mg/kg, Oral, Rat
ATE oral (mg/kg)	500.0

DISUBSTITUTED ALANINAMIDE**Acute toxicity - oral**

Notes (oral LD ₅₀)	LD ₅₀ > 2000 mg/kg, Oral, OECD 423
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Skin corrosion/irritation

Skin corrosion/irritation	Not irritating.
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Serious eye damage/irritation

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

Skin sensitisation	Sensitising.
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Germ cell mutagenicity

Genotoxicity - in vitro	This substance has no evidence of mutagenic properties. Ames test
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PECTATE LYASE**Acute toxicity - oral**

Notes (oral LD ₅₀)	LD ₅₀ >2000 mg/kg, Oral, OECD 401
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Skin corrosion/irritation

Skin corrosion/irritation	Not irritating. OECD 404
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Serious eye damage/irritation

Serious eye damage/irritation	Not irritating. OECD 405
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Respiratory sensitisation

Respiratory sensitisation	Sensitising.
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Germ cell mutagenicity

Genotoxicity - in vitro	This substance has no evidence of mutagenic properties.
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AMYLASE, alpha**Acute toxicity - oral**

Notes (oral LD ₅₀)	LD ₅₀ >2000 mg/kg, Oral, OECD 401
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Skin corrosion/irritation

Skin corrosion/irritation	Not irritating. OECD 404
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Serious eye damage/irritation

Serious eye damage/irritation	Not irritating. OECD 405
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CAFLON HDL/BIO**Respiratory sensitisation**

Respiratory sensitisation	Sensitising.
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Germ cell mutagenicity

Genotoxicity - in vitro	Based on available data the classification criteria are not met.
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DIPHENYL OXIDE**Acute toxicity - oral**

Acute toxicity oral (LD ₅₀ mg/kg)	2,930.0
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Species	Rat
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Notes (oral LD ₅₀)	LD ₅₀ 2930 mg/kg, Oral, Rat
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ATE oral (mg/kg)	2,930.0
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Acute toxicity - dermal

Acute toxicity dermal (LD ₅₀ mg/kg)	7,940.0
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Species	Rabbit
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Notes (dermal LD ₅₀)	LD ₅₀ 7940 mg/kg, Dermal, Rabbit
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ATE dermal (mg/kg)	7,940.0
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Inhalation	Vapours may irritate throat/respiratory system. Symptoms following overexposure may include the following: Headache. Dizziness. Drowsiness.
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Ingestion	Gastrointestinal symptoms, including upset stomach.
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Skin contact	Prolonged or repeated exposure may cause severe irritation.
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Eye contact	Irritating to eyes. Symptoms following overexposure may include the following: Redness. Pain.
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POLYETHYLENE GLYCOL STEARYL ETHER**Acute toxicity - oral**

Notes (oral LD ₅₀)	LD ₅₀ >21000 mg/kg, Oral, Rat
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Acute toxicity - dermal

Notes (dermal LD ₅₀)	LD ₅₀ >2000 mg/kg, Dermal, Rat
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Acute toxicity - inhalation

Notes (inhalation LC ₅₀)	LD ₅₀ >1.6 mg/l, Inhalation, Rat
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Skin corrosion/irritation

Animal data	Not irritating. Rabbit
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Serious eye damage/irritation

Serious eye damage/irritation	Causes serious eye damage. OECD 405
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Respiratory sensitisation

CAFLON HDL/BIO

Respiratory sensitisation No information available.

Skin sensitisation

Skin sensitisation Based on available data the classification criteria are not met.

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

Ingestion May cause discomfort if swallowed.

Skin contact Liquid may irritate skin.

Eye contact Causes serious eye damage.

DODECANAL

Acute toxicity - oral

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

Species Rat

Notes (oral LD₅₀) LD₅₀ 23100 mg/kg, Oral, 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

Respiratory sensitisation No information available.

CAFLON HDL/BIO**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.

BETA IONONE**Acute toxicity - oral**

Acute toxicity oral (LD₅₀ mg/kg) 4,590.0

Species Rat

Notes (oral LD₅₀) LD₅₀ 4590 mg/kg, Oral, Rat

Acute toxicity - dermal

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

Species Rabbit

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

Skin corrosion/irritation

Skin corrosion/irritation No information available.

CAFLON HDL/BIO

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

Serious eye damage/irritation

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

Respiratory sensitisation

Respiratory sensitisation Based on available data the classification criteria are not met.

Skin sensitisation

Skin sensitisation Based on available data the classification criteria are not met.

Germ cell mutagenicity

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

Carcinogenicity

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

Reproductive toxicity

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

Specific target organ toxicity - single exposure

STOT - single exposure Based on available data the classification criteria are not met.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure Chronic, NOAEL (90d) 100 mg/kg, Oral, Rat

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 May cause discomfort if swallowed.

Skin contact Prolonged skin contact may cause temporary irritation.

Eye contact May cause temporary eye irritation.

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

Acute toxicity - oral

ATE oral (mg/kg) 500.0

Specific target organ toxicity - single exposure

STOT - single exposure Based on available data the classification criteria are not met.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure Based on available data the classification criteria are not met.

Aspiration hazard

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

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

CAFLON HDL/BIO

Acute toxicity - oral

Notes (oral LD₅₀) LD₅₀ 49.6 - 75 mg/kg, Oral, Rat

ATE oral (mg/kg) 100.0

Acute toxicity - dermal

Notes (dermal LD₅₀) LD₅₀ 87.12 - 141 mg/kg, Dermal, Rat

ATE dermal (mg/kg) 50.0

Acute toxicity - inhalation

Notes (inhalation LC₅₀) LC₅₀ 0.171 mg/l, Inhalation, Rat

ATE inhalation (vapours mg/l) 0.5

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 Buehler test - 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 Two-generation study,
Fertility - 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

CAFLON HDL/BIO

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.

BENZENESULFONIC ACID, 4-C10-13-SEC-ALKYL DERIVS., COMPS. WITH TRIETHANOLAMINE

Ecotoxicity Harmful to aquatic life with long lasting effects.

C13-15 ALCOHOL ETHOXYLATE 7EO

Ecotoxicity Harmful to aquatic life with long lasting effects.

TETRASODIUM (1-HYDROXYETHYLIDENE)BISPHOSPHONATE

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

SUBTILISIN

Ecotoxicity Very toxic to aquatic life with long lasting effects.

(L) HEXYL CINNAMAL

Ecotoxicity Toxic to aquatic life with long lasting effects.

(L) BENZYL SALICYLATE

Ecotoxicity Harmful to aquatic life with long lasting effects.

SODIUM HYDROXIDE

Ecotoxicity The product may affect the acidity (pH) of water which may have hazardous effects on aquatic organisms.

HEXYL SALICYLATE

Ecotoxicity Very toxic to aquatic life with long lasting effects.

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.

METHYL CEDRYL KETONE

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

DIPHENYL OXIDE

Ecotoxicity The product contains substances which are toxic to aquatic organisms and which may cause long-term adverse effects in the aquatic environment.

POLYETHYLENE GLYCOL STEARYL ETHER

CAFLON HDL/BIO

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

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.

BETA IONONE

Ecotoxicity Toxic to aquatic life with long lasting effects.

12.1. Toxicity

Toxicity Not considered toxic to fish.

Ecological information on ingredients.

BENZENESULFONIC ACID, 4-C10-13-SEC-ALKYL DERIVS., COMPS. WITH TRIETHANOLAMINE

Toxicity Harmful to aquatic life.

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, 96 hours: 5.7 mg/l, Brachydanio rerio (Zebra Fish)

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 10.6 mg/l, Daphnia magna

Acute toxicity - aquatic plants NOEC, 72 hours: 3.4 mg/l, Scenedesmus subspicatus

Chronic aquatic toxicity

Chronic toxicity - aquatic invertebrates NOEC, 21 days: 2.8 mg/l, Daphnia magna

C13-15 ALCOHOL ETHOXYLATE 7EO

Toxicity Harmful to aquatic life.

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, 96 hours: 1-10 mg/l, Fish

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 1 - 10 mg/l, Daphnia magna

Acute toxicity - aquatic plants EC₅₀, 72 hours: 1 - 10 mg/l,

COCO DIETHEANOLAMIDE

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, 96 hours: 2.4 mg/l,

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 3.2 mg/l, Daphnia magna

Acute toxicity - aquatic plants EC₅₀, 72 hours: 18.6 mg/l, Freshwater algae

Chronic aquatic toxicity

CAFLON HDL/BIO

Chronic toxicity - fish early life stage NOEC, 28 days: 0.32 mg/l,

Chronic toxicity - aquatic invertebrates NOEC, 21 days: 0.07 mg/l, Daphnia magna

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

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, 96 hours: >7.1 mg/l, Fish
OECD 203

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 7.4 mg/l, Daphnia magna
OECD 202
NOEC, 48 hours: 0.27 mg/l, Daphnia magna

Acute toxicity - aquatic plants EC₅₀, 72 hours: 27.7 mg/l, Algae
OECD 201

FATTY ACIDS, COCO POTASSIUM SALTS

Acute aquatic toxicity

Acute toxicity - aquatic plants EC₅₀, 72 hour: > 10 mg/l, Algae

TETRASODIUM (1-HYDROXYETHYLIDENE)BISPHOSPHONATE

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, 96 hours: > 200 mg/l, Poecilia reticulata (Guppy)
OECD 203

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 370 - 380 mg/l, Daphnia magna
OECD 202

Acute toxicity - aquatic plants EC₅₀, 96 hour: 9.16 mg/l, Selenastrum capricornutum

Acute toxicity - microorganisms IC₅₀, 0.5 hour: > 290 mg/l,

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

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

CAFLON HDL/BIO**Acute aquatic toxicity**

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

(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

(L) BENZYL SALICYLATE

Toxicity	Harmful to aquatic life.
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Acute aquatic toxicity

Acute toxicity - fish	LC ₅₀ , 96 hour: 1.03 mg/kg, Fish OECD 203
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hour: 2.25 mg/l, Daphnia magna OECD 202

AMYL SALICYLATE**Acute aquatic toxicity**

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

Chronic aquatic toxicity

M factor (Chronic)	1
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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	LC ₅₀ , 96 hour: 1.3 mg/l, Fish OECD 203
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CAFLON HDL/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

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

SODIUM HYDROXIDE

Toxicity	The product may affect the acidity (pH) of water which may have hazardous effects on aquatic organisms.
<u>Acute aquatic toxicity</u>	
Acute toxicity - fish	LC ₅₀ , 96 hours: 33-189 mg/l mg/l, Fish LC ₅₀ , 96 hour: 45.5 mg/l, Oncorhynchus mykiss (Rainbow trout) LC ₅₀ , 96 hour: 125 mg/l, Freshwater fish Gambusia affinis (Mosquito fish)
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: 40-240 mg/l mg/l, Daphnia magna

HEXYL SALICYLATE

Toxicity	Very toxic to aquatic life.
<u>Acute aquatic toxicity</u>	
LE(C)₅₀	0.1 < L(E)C ₅₀ ≤ 1

CAFLON HDL/BIO

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

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)C ₅₀ ≤ 1
M factor (Acute)	1
Acute toxicity - fish	LOEC, 96 hours: 9.24 mg/l, Pimephales promelas (Fat-head Minnow)

CAFLON HDL/BIO

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)

2-TERT-BUTYLCYCLOHEXYL ACETATE

<u>Acute aquatic toxicity</u>	
Acute toxicity - fish	LC ₅₀ , 96 hour: 5.6 mg/l, Fish
Acute toxicity - aquatic plants	LC ₅₀ , 75 hour: 4.2 mg/l, Algae

METHYL CEDRYL KETONE

<u>Acute aquatic toxicity</u>	
LE(C)₅₀	0.1 < L(E)C ₅₀ ≤ 1
M factor (Acute)	1
<u>Chronic aquatic toxicity</u>	
M factor (Chronic)	1

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	EyC ₅₀ , 72 hour: > 100 mg/l, Algae OECD 201 NOEC, : > 100 mg/l, Algae OECD 201

PECTATE LYASE

<u>Acute aquatic toxicity</u>	
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

CAFLON HDL/BIO**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

DIPHENYL OXIDE**Acute aquatic toxicity**

Acute toxicity - fish	LC ₅₀ , 96 hours: 5.1 (Fathead Minnow) mg/l, Fish
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: 1.7 mg/l, Daphnia magna

POLYETHYLENE GLYCOL STEARYL ETHER

Toxicity Very toxic to aquatic life. Toxic to aquatic life with long lasting effects.

Acute aquatic toxicity

LE(C)₅₀	0.1 < L(E)C ₅₀ ≤ 1
M factor (Acute)	1
Acute toxicity - fish	LC ₅₀ , 96 hours: 4.1 mg/l, Leuciscus idus (Golden orfe) LC ₅₀ , 96 hours: 5 - 6.3 mg/l, Oncorhynchus mykiss (Rainbow trout) LC ₅₀ , 96 hours: 8.15 mg/l, Pimephales promelas (Fat-head Minnow) OECD 203
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: > 1 - 10 mg/l, Daphnia magna EL ₅₀ , 48 hours: 0.32 mg/l, Daphnia magna OECD 202
Acute toxicity - aquatic plants	ErC ₅₀ , 48 hours: 10 mg/l, Pseudokirchneriella subcapitata EL ₅₀ , 72 hours: 0.56 mg/l, Pseudokirchneriella subcapitata OECD 201
Acute toxicity - microorganisms	EC ₅₀ , : 1000 mg/l, Activated sludge This information is based on test data from similar products EC ₁₀ , : 2 mg/l, Activated sludge This information is based on test data from similar products

Chronic aquatic toxicity

Chronic toxicity - fish early life stage	NOEC, 30 days: 0.28 mg/l, Pimephales promelas (Fat-head Minnow)
Chronic toxicity - aquatic invertebrates	NOEC, 21 days: 0.77 mg/l, Daphnia magna

DODECANAL

Toxicity Not considered toxic to fish.

Acute aquatic toxicity

CAFLON HDL/BIO

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

BETA IONONE

Toxicity	Toxic to aquatic life.
<u>Acute aquatic toxicity</u>	
Acute toxicity - fish	LC ₅₀ , 96 hours: 5.09 mg/l, Freshwater fish
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: 4.03 mg/l, Daphnia magna
Acute toxicity - aquatic plants	IC ₅₀ , 72 hours: 22.9 mg/l, Freshwater algae

1,2-BENZISOTHIAZOL-3(2H)-ONE**Acute aquatic toxicity**

LE(C)₅₀	0.1 < L(E)C ₅₀ ≤ 1
M factor (Acute)	1

XX REACTION MASS OF: 5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE [EC NO. 247-500-7] AND 2-METHYL-2H-ISOTHIAZOL-3-ONE XX [EC NO. 220-239-6] (3:1)**Acute aquatic toxicity**

LE(C)₅₀	0.001 < L(E)C ₅₀ ≤ 0.01
M factor (Acute)	100
Acute toxicity - fish	LC ₅₀ , 96 hour: 0.19 - 0.22 mg/l, Oncorhynchus mykiss (Rainbow trout) OECD 203 NOEC, 36 day: 0.02 mg/l, Oncorhynchus mykiss (Rainbow trout) NOEC, 28 day: 0.098 mg/l, Oncorhynchus mykiss (Rainbow trout) NOEC, 14 day: 0.05 mg/l, Oncorhynchus mykiss (Rainbow trout) OECD 210
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hour: 0.1 - 0.16 mg/l, Daphnia magna OECD 202
Acute toxicity - aquatic plants	EC ₅₀ , 72 hour: 0.027- 0.048 mg/l, Pseudokirchneriella subcapitata NOEC, 72 hour: 0.0012 mg/l, Pseudokirchneriella subcapitata NOEC, 72 hour: 0.0014 mg/l, (Skeletonema costatum) OECD 201 ErC ₅₀ , 48 hour: 0.0052 mg/l, (Skeletonema costatum) NOEC, 48 hour: 0.00049 mg/l, (Skeletonema costatum)

CAFLON HDL/BIO

Acute toxicity - microorganisms	EC ₅₀ , 3 hour: 7.92 mg/l, Activated sludge
<u>Chronic aquatic toxicity</u>	
NOEC	0.0001 < NOEC ≤ 0.001
Degradability	Non-rapidly degradable
M factor (Chronic)	100
Chronic toxicity - aquatic invertebrates	NOEC, 21 day: 0.004 - 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.**BENZENESULFONIC ACID, 4-C10-13-SEC-ALKYL DERIVS., COMPS. WITH TRIETHANOLAMINE**

Persistence and degradability	The substance is readily biodegradable.
Biodegradation	- Degradation (%) 100: 28 days OCED 301B

C13-15 ALCOHOL ETHOXYLATE 7EO

Persistence and degradability	The product is readily biodegradable. This surfactant complies with the biodegradability criteria as laid down in Regulation (EC) No. 648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them at their direct request, or at the request of a detergent manufacturer.
Biodegradation	- Degradation 60: > 28 days OCED 301B

COCO DIETHEANOLAMIDE

Biodegradation	- Degradation (%) 92.5: 28 days
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ALCOHOLS, C12-14, ETHOXYLATED, SULFATES, SODIUM SALTS

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

TETRASODIUM (1-HYDROXYETHYLIDENE)BISPHOSPHONATE

Persistence and degradability	The product is not readily biodegradable.
Biodegradation	- Degradation 0.4 - 4.8%: 79 day OECD 304A - Degradation 1.6%: 79 day OECD 301E

CAFLON HDL/BIO**SUBTILISIN****Persistence and degradability**

The substance is readily biodegradable.

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

The product is readily biodegradable.

Biodegradation- Degradation 100%: 28 day
(OECD 301B)**(L) HEXYL CINNAMAL****Persistence and degradability**

The product is readily biodegradable.

Biodegradation- Degradation 97%: 28 day
OECD 301F**(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**HEXAMETHYLINDANOPYRAN****Persistence and degradability**

The product is not readily biodegradable.

SODIUM HYDROXIDE**Persistence and degradability**

The product contains only inorganic substances which are not biodegradable.

HEXYL SALICYLATE**Persistence and degradability**

The product is readily biodegradable.

Biodegradation- Degradation 91%: 28 days
OECD 301F**(L) BUTYLPHENYL METHYLPROPIONAL**

CAFLON HDL/BIO**Persistence and degradability**

The product is readily biodegradable.

Biodegradation

- Degradation 84%: 28 day
OECD 301F

ALPHA ISOMETHYL IONONE**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

BENZOPHENONE**Persistence and degradability**

The product is not biodegradable.

METHYL CEDRYL KETONE**Persistence and degradability**

The product is not readily 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

DIPHENYL OXIDE**Persistence and degradability**

The substance is readily biodegradable.

CAFLON HDL/BIO**POLYETHYLENE GLYCOL STEARYL ETHER**

Persistence and degradability The product is readily biodegradable.

Biodegradation - Degradation 83.6%: 28 days
OCED 301B

DODECANAL

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

Biodegradation - Degradation 73%: 28 days
OECD 301F

BETA IONONE

Persistence and degradability The product is readily biodegradable.

Biodegradation - Degradation 74%: 28 day
OCED 301B

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

Biodegradation - 24%: 28 days
OCED 301B

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

Persistence and degradability The product is not readily biodegradable.

Biodegradation - Degradation <50%: 10 days

12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient Not determined.

Ecological information on ingredients.**BENZENESULFONIC ACID, 4-C10-13-SEC-ALKYL DERIVS., COMPS. WITH TRIETHANOLAMINE**

Bioaccumulative potential The product is not bioaccumulating.

C13-15 ALCOHOL ETHOXYLATE 7EO

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

Partition coefficient No information available.

COCO DIETHEANOLAMIDE

Bioaccumulative potential BCF: 65.36,

Partition coefficient log Pow: 3.75

CAFLON HDL/BIO

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

TETRASODIUM (1-HYDROXYETHYLIDENE)BISPHOSPHONATE

Bioaccumulative potential	Bioaccumulation is unlikely. BCF: 17.9, Fish OECD 305 C
Partition coefficient	log Pow: < -3.5

SUBTILISIN

Bioaccumulative potential	The product is not bioaccumulating.
Partition coefficient	log Pow: < 0

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

Bioaccumulative potential	BCF: 6.95,
Partition coefficient	log Pow: 0.6 - 1.3

(L) HEXYL CINNAMAL

Bioaccumulative potential	Potentially bioaccumulating.
Partition coefficient	log Pow: 4.866

(L) BENZYL SALICYLATE

Bioaccumulative potential	May accumulate in soil and water systems.
Partition coefficient	log Pow: 4.3

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

HEXAMETHYLINDANOPYRAN

Bioaccumulative potential	BCF: 1584,
Partition coefficient	log Pow: 5.3

SODIUM HYDROXIDE

Bioaccumulative potential	The product is not bioaccumulating.
Partition coefficient	No information available.

HEXYL SALICYLATE

Bioaccumulative potential	Potentially bioaccumulating.
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CAFLON HDL/BIO

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

BENZOPHENONE

Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient log Pow: 3.18

METHYL CEDRYL KETONE

Partition coefficient : 5.66

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.

Partition coefficient log Pow: <0

AMYLASE, alpha

Bioaccumulative potential The product is not bioaccumulating.

Partition coefficient log Pow: < 0

DIPHENYL OXIDE

Bioaccumulative potential May accumulate in soil and water systems.

Partition coefficient : 4.21

POLYETHYLENE GLYCOL STEARYL ETHER

Bioaccumulative potential BCF: < 400, Pimephales promelas (Fat-head Minnow)

Partition coefficient log Pow: 4.57

DODECANAL

Bioaccumulative potential BCF: 711,

Partition coefficient log Pow: 3.6

CAFLON HDL/BIO**BETA IONONE**

Bioaccumulative potential Potentially bioaccumulating.

Partition coefficient log Pow: 3.77

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

Bioaccumulative potential The product does not contain any substances expected to be bioaccumulating.
BCF: 3.2, Fish

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

Bioaccumulative potential Bioaccumulation is unlikely. BCF: 3.6, Estimated value. : ,

Partition coefficient log Pow: -0.71 - 0.75 OECD 107

12.4. Mobility in soil

Mobility The product is soluble in water.

Ecological information on ingredients.**C13-15 ALCOHOL ETHOXYLATE 7EO**

Mobility The product is miscible with water and may spread in water systems.

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

Mobility The product is soluble in water.

TETRASODIUM (1-HYDROXYETHYLIDENE)BISPHOSPHONATE

Mobility The product is soluble in water.

(L) HEXYL CINNAMAL

Mobility No information available.

(L) BENZYL SALICYLATE

Mobility No information available.

SODIUM HYDROXIDE

Mobility The product is water-soluble and may spread in water systems.

HEXYL SALICYLATE

Mobility No information available.

BENZOPHENONE

Mobility Not determined.

METHYL CEDRYL KETONE

CAFLON HDL/BIO

Mobility The product is insoluble in water.

POLYETHYLENE GLYCOL STEARYL ETHER

Mobility No information available.

DODECANAL

Mobility No information available.

BETA IONONE

Mobility No data recorded.

12.5. Results of PBT and vPvB assessment

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

Ecological information on ingredients.

BENZENESULFONIC ACID, 4-C10-13-SEC-ALKYL DERIVS., COMPDS. WITH TRIETHANOLAMINE

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

C13-15 ALCOHOL ETHOXYLATE 7EO

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

TETRASODIUM (1-HYDROXYETHYLIDENE)BISPHOSPHONATE

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

SUBTILISIN

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.

(L) BENZYL SALICYLATE

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

SODIUM HYDROXIDE

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

HEXYL SALICYLATE

CAFLON HDL/BIO

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

BENZOPHENONE

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

POLYETHYLENE GLYCOL STEARYL ETHER

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

DODECANAL

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

BETA IONONE

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

XX REACTION MASS OF: 5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE [EC NO. 247-500-7] AND 2-METHYL-2H-ISOTHIAZOL-3-ONE XX [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 known.

Ecological information on ingredients.

BENZENESULFONIC ACID, 4-C10-13-SEC-ALKYL DERIVS., COMPDS. WITH TRIETHANOLAMINE

Other adverse effects None known.

C13-15 ALCOHOL ETHOXYLATE 7EO

Other adverse effects Not known.

TETRASODIUM (1-HYDROXYETHYLIDENE)BISPHOSPHONATE

Other adverse effects Not determined.

(L) HEXYL CINNAMAL

Other adverse effects None known.

(L) BENZYL SALICYLATE

Other adverse effects None known.

SODIUM HYDROXIDE

CAFLON HDL/BIO

Other adverse effects Not available.

HEXYL SALICYLATE

Other adverse effects None known.

BENZOPHENONE

Other adverse effects Not determined.

POLYETHYLENE GLYCOL STEARYL ETHER

Other adverse effects No information available.

DODECANAL

Other adverse effects None known.

BETA IONONE

Other adverse effects None known.

SECTION 13: Disposal considerations**13.1. Waste treatment methods**

General information Waste is classified as hazardous waste. Do not puncture or incinerate, even when empty.

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

CAFLON HDL/BIO

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

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

CAFLON HDL/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

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

02/10/2020

CAFLON HDL/BIO

Version number	1.000
SDS number	60838
SDS status	Approved.
Hazard statements in full	H290 May be corrosive to metals. H301 Toxic if swallowed. H302 Harmful if swallowed. H310 Fatal in contact with skin. H314 Causes severe skin burns and eye damage. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H319 Causes serious eye irritation. H330 Fatal if inhaled. H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled. H335 May cause respiratory irritation. H351 Suspected of causing cancer. H361f Suspected of damaging fertility. H371 May cause damage to organs if swallowed. H400 Very toxic to aquatic life. H410 Very toxic to aquatic life with long lasting effects. H411 Toxic to aquatic life with long lasting effects. H412 Harmful to aquatic life with long lasting effects. EUH208 Contains 1,2-BENZISOTHIAZOL-3(2H)-ONE. May produce an allergic reaction.
Signature	Jitendra Panchal