



SAFETY DATA SHEET CAFLON LL50/E

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

1.1. Product identifier

Product name CAFLON LL50/E

Product number 14915

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
Aquarius House
6 Mid Point Business Park
Bradford
BD3 7AY
+44 1274 267300
sds@univar.com
+44 1274 267306

1.4. Emergency telephone number

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

Sds No. 14915

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

Classification (67/548/EEC or 1999/45/EC) Xi;R41.

2.2. Label elements

Pictogram



Signal word Danger

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

CAFLON LL50/E

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.

Contains ALCOHOLS C12 - 14 (7 - 7.5 EO), BENZENESULFONIC ACID, 4-C10-13-SEC-ALKYL DERIVS., COMPDS. WITH TRIETHANOLAMINE, C13-15 ALCOHOL ETHOXYLATE 7EO, 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

ALCOHOLS C12 - 14 (7 - 7.5 EO)			10-30%
CAS number: 68439-50-9			
Classification		Classification (67/548/EEC or 1999/45/EC)	
Eye Dam. 1 - H318		Xn;R22. Xi;R41.	
Aquatic Chronic 3 - H412			
GLYCERINE			>0.5
CAS number: 56-81-5	EC number: 200-289-5	REACH registration number: 01-2119471987-18-XXXX	
Classification		Classification (67/548/EEC or 1999/45/EC)	
Not Classified			
MONOPROPYLENE GLYCOL			>1
CAS number: 57-55-6	EC number: 200-338-0	REACH registration number: 01-2119456809-23	
Classification		Classification (67/548/EEC or 1999/45/EC)	
Not Classified		-	
BENZENESULFONIC ACID, 4-C10-13-SEC-ALKYL DERIVS., COMPDS. WITH TRIETHANOLAMINE			1-5%
CAS number: 121617-08-1	REACH registration number: 01-2119971970-28		
Classification		Classification (67/548/EEC or 1999/45/EC)	
Skin Irrit. 2 - H315		Xi;R38,R41.	
Eye Dam. 1 - H318			

CAFLON LL50/E

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

Classification (67/548/EEC or 1999/45/EC)

Xn; R22. Xi; R41. N; R50

PROPAN-2-OL**1-5%**

CAS number: 67-63-0

EC number: 200-661-7

REACH registration number: 01-
2119457558-25-XXXX**Classification**

Flam. Liq. 2 - H225

Eye Irrit. 2 - H319

STOT SE 3 - H336

Classification (67/548/EEC or 1999/45/EC)

F; R11. Xi; R36. R67

**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**Classification**

Skin Irrit. 2 - H315

Eye Dam. 1 - H318

Aquatic Chronic 3 - H412

Classification (67/548/EEC or 1999/45/EC)

Xi; R38, R41

1,2-BENZISOTHAZOL-3(2H)-ONE**<0.1%**

CAS number: 2634-33-5

EC number: 220-120-9

M factor (Acute) = 10

Classification

Acute Tox. 4 - H302

Skin Irrit. 2 - H315

Eye Dam. 1 - H318

Skin Sens. 1 - H317

Aquatic Acute 1 - H400

Classification (67/548/EEC or 1999/45/EC)

Xn; R22. Xi; R41, R38. N; R50. R43

CAFLON LL50/E**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

Classification (67/548/EEC or 1999/45/EC)

Xn; R22. Xi; R41, R37/38. N; R50, R51/53. R42

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

Classification (67/548/EEC or 1999/45/EC)

C; R35

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

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 if any discomfort continues.
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	Prolonged skin contact may cause redness and irritation. May cause an allergic skin reaction.
Eye contact	Prolonged contact may cause redness and/or tearing.

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

Notes for the doctor	No specific recommendations. If in doubt, get medical attention promptly.
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SECTION 5: Firefighting measures**5.1. Extinguishing media**

Suitable extinguishing media	Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog.
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5.2. Special hazards arising from the substance or mixture

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Specific hazards Oxides of the following substances: Carbon. Sulphur.

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.

6.2. Environmental precautions

Environmental precautions Collect and dispose of spillage as indicated in Section 13.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Stop leak if possible without risk. Absorb in vermiculite, dry sand or earth and place into containers. Flush contaminated area with plenty of water. Avoid the spillage or runoff entering drains, sewers or watercourses.

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 contact with skin and eyes.

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

MONOPROPYLENE GLYCOL

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

Long-term exposure limit (8-hour TWA): WEL 150 ppm 474 mg/m³ total vapour and particulates

PROPAN-2-OL

Short-term exposure limit (15-minute): WEL 500 ppm 1250 mg/m³

Long-term exposure limit (8-hour TWA): WEL 400 ppm 999 mg/m³

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

WEL = Workplace Exposure Limit

Sen = Capable of causing occupational asthma.

CAFLON LL50/E**Ingredient comments**

WEL = Workplace Exposure Limits

ALCOHOLS C12 - 14 (7 - 7.5 EO) (CAS: 68439-50-9)**Ingredient comments** No exposure limits known for ingredient(s).**GLYCERINE (CAS: 56-81-5)****Ingredient comments** WEL = Workplace Exposure Limits**DNEL** Industry - Inhalation; Long term local effects: 56 mg/m³

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

DISTILLED FATTY ACID C8-18 (CAS: 67701-05-7)**Ingredient comments** No exposure limits known for ingredient(s).**MONOPROPYLENE GLYCOL (CAS: 57-55-6)**

DNEL

General population - Inhalation; Long term systemic effects: 50 mg/m³
 General population - Inhalation; Long term local effects: 10 mg/m³
 Workers - Inhalation; Long term systemic effects: 168 mg/m³
 Workers - Inhalation; Long term local effects: 10 mg/m³

PNEC

- Fresh water; 260 mg/l
- Marine water; 26 mg/l
- STP; 20000 mg/l
- Sediment (Freshwater); 572 mg/kg
- Sediment (Marinewater); 57.2 mg/kg
- Soil; 50 mg/kg

BENZENESULFONIC ACID, 4-C10-13-SEC-ALKYL DERIVS., COMPDS. WITH TRIETHANOLAMINE (CAS: 121617-08-1)

DNEL

Industry - Inhalation; Long term systemic effects: 4.1 mg/m³
 Industry - Dermal; Long term systemic effects: 5.29 mg/kg/day
 Consumer - Inhalation; Long term systemic effects: 1.01 mg/m³
 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)

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

PROPAN-2-OL (CAS: 67-63-0)

DNEL Industry - Dermal; Long term systemic effects: 888 mg/kg/day
Industry - Inhalation; Long term systemic effects: 500 mg/m³
Consumer - Dermal; Long term systemic effects: 319 mg/kg/day
Consumer - Inhalation; Long term systemic effects: 89 mg/m³
Consumer - Oral; Long term systemic effects: 26 mg/kg/day

PNEC - Fresh water; 140.9 mg/l
- Marine water; 140.9 mg/l
- Intermittent release; 140.9 mg/l
- STP; 2251 mg/l
- Sediment (Freshwater); 552 mg/kg
- Sediment (Marinewater); 552 mg/kg
- Soil; 28 mg/kg

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

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

PNEC - Fresh water; 0.24 mg/l
- Soil; 0.946 mg/kg
- STP; 10000 mg/l
- Marine water; 0.024 mg/l
- Intermittent release; 0.071 mg/l
- Sediment (Freshwater); 5.45 mg/kg
- Sediment (Marinewater); 0.545 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

STILBENE DERIVATIVE IN AQUEOUS SOLUTION

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

DIPROPYLENE GLYCOL (CAS: 25265-71-8)

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

CAFLON LL50/E

DNEL Industry - Dermal; Long term : 51 mg/kg/day
 Industry - Inhalation; Long term : 70 mg/m³
 Industry - Oral; Long term : 24 mg/kg/day
 Consumer - Dermal; Long term : 84 mg/kg/day
 Consumer - Inhalation; Long term : 238 mg/m³

PNEC - Fresh water; 0.1 mg/l
 - Marine water; 0.01 mg/l
 - STP; 1000 mg/l
 - Sediment; 0.0238 (Sea sediment) mg/kg
 - Sediment; 0.238 (Fresh water sediment) mg/kg
 - Soil; 0.0253 mg/kg

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

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

PNEC - Fresh water; 5,2 µg/l
 - Marine water; 0,52 µg/l
 - STP; 6.5E4 µg/l

SUBTILISIN (CAS: 9014-01-1)

DMEL Workers - Inhalation; Long term local effects: 0.06 mg/m³
 Professional, Consumer - Inhalation; Long term local effects: 0.015 mg/m³

PNEC - Fresh water; 0.06 mg/l
 - Marine water; 0.006 mg/l
 - STP; 65000 mg/l

LINALOOL (CAS: 78-70-6)

DNEL Industry - Dermal; Short term systemic effects: 5 mg/kg/day
 Industry - Inhalation; Short term systemic effects: 16.5 mg/m³
 Industry - Dermal; Long term systemic effects: 2.5 mg/kg/day
 Industry - Inhalation; Long term systemic effects: 2.8 mg/m³
 Consumer - Dermal; Short term systemic effects: 2.5 mg/kg/day
 Consumer - Inhalation; Short term systemic effects: 4.1 mg/m³
 Consumer - Oral; Short term systemic effects: 1.2 mg/kg/day
 Consumer - Inhalation; Long term systemic effects: 0.7 mg/m³
 Consumer - Oral; Long term systemic effects: 0.2 mg/kg/day

PNEC - Fresh water; 0.2 mg/l
 - Marine water; 0.02 mg/l
 - Sediment (Freshwater); 2.22 mg/kg
 - Sediment (Marinewater); 0.222 mg/kg
 - Soil; 0.327 mg/kg
 - STP; > 10 mg/l

SODIUM HYDROXIDE (CAS: 1310-73-2)

Ingredient comments WEL = Workplace Exposure Limits

DNEL Consumer - Inhalation; Long term local effects: 1 mg/m³
 Industry - Inhalation; Long term local effects: 1 mg/m³

CITRONELLOL (CAS: 106-22-9)

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DNEL Industry - Dermal; Long term systemic effects: 45.8 mg/kg/day
Industry - Inhalation; Long term systemic effects: 161.6 mg/m³
Consumer - Dermal; Long term systemic effects: 27.5 mg/kg/day
Consumer - Inhalation; Long term systemic effects: 47.8 mg/m³
Consumer - Oral; Long term systemic effects: 13.8 mg/kg/day

PNEC - Fresh water; 0.0024 mg/l
- Marine water; 0.00024 mg/l
- STP; 580 mg/l
- Sediment (Freshwater); 0.0256 mg/l
- Sediment (Marinewater); 0.00256 mg/l
- Soil; 0.00371 mg/l

(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

GAMMA UNDECALACTONE (CAS: 104-67-6)

DNEL Industry - Inhalation; Long term systemic effects: 19 mg/m³
Industry - Dermal; Long term systemic effects: 5.38 mg/kg/day
Consumer - Inhalation; Long term systemic effects: 4.68 mg/m³
Consumer - Dermal; Long term systemic effects: 2.7 mg/kg/day
Consumer - Oral; Long term systemic effects: 2.7 mg/kg/day

PNEC - Fresh water; 0.00585 mg/l
- Marine water; 0.0585 mg/l
- STP; 80 mg/l
- Sediment (Marinewater); 0.628 mg/kg
- Sediment (Freshwater); 0.063
- Soil; 0.122

(L) 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

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

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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

8.2. Exposure controls

Protective equipment



Appropriate engineering controls

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

Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. The following protection should be worn: Chemical splash goggles or face shield. EN 166

Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. EN 374

Other skin and body protection

Wear appropriate clothing to prevent any possibility of skin contact.

Hygiene measures

Do not smoke in work area. Wash hands 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

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

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 - 9
Melting point	Not determined.
Initial boiling point and range	100°C @
Flash point	89°C CC (Closed cup).
Evaporation rate	Not applicable.

CAFLON LL50/E

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	Not applicable.
Relative density	1.06 @ 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	250 - 500 cP @ 20°C
Explosive properties	No information available.
Explosive under the influence of a flame	No information available.
Oxidising properties	No information available.
<u>9.2. Other information</u>	
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.
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10.2. Chemical stability

Stability	Stable at normal ambient temperatures and when used as recommended.
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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 contact with the following materials: Oxidising agents. Reducing agents.
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10.5. Incompatible materials

Materials to avoid Strong oxidising agents. Strong reducing agents.

10.6. Hazardous decomposition products

Hazardous decomposition products Fire creates: Oxides of the following substances: Carbon. Nitrogen. Sulphur.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

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

Species Rat

ATE oral (mg/kg) 11,904.76

Skin corrosion/irritation

Animal data No information available.

Serious eye damage/irritation

Serious eye damage/irritation No information available.

Respiratory sensitisation

Respiratory sensitisation No information available.

Skin sensitisation

Skin sensitisation May produce an allergic 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 system irritation.

Ingestion May cause stomach pain or vomiting.

Skin contact May produce an allergic reaction.

Eye contact Risk of serious damage to eyes.

Toxicological information on ingredients.

ALCOHOLS C12 - 14 (7 - 7.5 EO)

CAFLON LL50/E**Acute toxicity - oral**

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

Species Rat

Notes (oral LD₅₀) OECD 401

Acute toxicity - dermal

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

Species Rabbit

Notes (dermal LD₅₀) OECD 402

Acute toxicity - inhalation

Acute toxicity inhalation (LC₅₀ vapours mg/l) 1.6

Species Rat

Notes (inhalation LC₅₀) OECD 403

ATE inhalation (vapours mg/l) 1.6

Inhalation Upper respiratory irritation.

Ingestion Gastrointestinal symptoms, including upset stomach.

Skin contact Slightly irritating.

Eye contact Risk of serious damage to eyes.

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

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

Species Rat

Acute toxicity - dermal

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

Species Rabbit

Skin corrosion/irritation

Animal data Irritating.

Serious eye damage/irritation

Serious eye damage/irritation Moderately irritating. Risk of serious damage to eyes.

Skin sensitisation

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

CAFLON LL50/E**Germ cell mutagenicity**

Genotoxicity - in vitro Bacterial reverse mutation test:

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

Human skin model test Data lacking.

Serious eye damage/irritation

Serious eye damage/irritation Data lacking.

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.

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.

Eye contact Causes serious eye damage.

CAFLON LL50/E**PROPAN-2-OL****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

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

Species Rabbit

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

Skin corrosion/irritation

Animal data Not irritating.

Respiratory sensitisation

Respiratory sensitisation Not sensitising.

Skin sensitisation

Skin sensitisation Not sensitising.

Germ cell mutagenicity

Genotoxicity - in vivo Data lacking.

Carcinogenicity

Carcinogenicity There is no evidence that the product can cause cancer.

IARC carcinogenicity IARC Group 3 Not classifiable as to its carcinogenicity to humans.

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.

Inhalation May cause respiratory system irritation. Vapours may cause drowsiness and dizziness.

Ingestion Droplets of the product aspirated into the lungs through ingestion or vomiting may cause a serious chemical pneumonia.

Skin contact Prolonged contact may cause dryness of the skin.

Eye contact Irritating to eyes.

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

CAFLON LL50/E

Notes (oral LD₅₀)	LD ₅₀ >2000 mg/kg, Oral, Rat
<u>Acute toxicity - dermal</u>	
Notes (dermal LD₅₀)	LD ₅₀ > 2000 mg/kg, Dermal, Rat
<u>Skin sensitisation</u>	
Skin sensitisation	Not sensitising.
<u>Germ cell mutagenicity</u>	
Genotoxicity - in vitro	Based on available data the classification criteria are not met.
<u>Inhalation</u>	
Inhalation	May cause respiratory system irritation.
<u>Ingestion</u>	
Ingestion	The product irritates mucous membranes and may cause abdominal discomfort if swallowed.
<u>Skin contact</u>	
Skin contact	Causes skin irritation.
<u>Eye contact</u>	
Eye contact	Causes serious eye damage.

SECTION 12: Ecological Information

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

Ecological information on ingredients.

ALCOHOLS C12 - 14 (7 - 7.5 EO)

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

C13-15 ALCOHOL ETHOXYLATE 7EO

Ecotoxicity Harmful to aquatic life with long lasting effects.

PROPAN-2-OL

Ecotoxicity The product is not expected to be toxic to aquatic organisms.

12.1. Toxicity

Toxicity Not considered toxic to fish.

Ecological information on ingredients.

ALCOHOLS C12 - 14 (7 - 7.5 EO)

Toxicity The product contains a substance which is harmful to aquatic organisms.

Acute toxicity - aquatic invertebrates NOEC, : 0.77 mg/l, Daphnia magna

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

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

CAFLON LL50/E

Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: 10.6 mg/l, Daphnia magna
Acute toxicity - aquatic plants	NOEC, 72 hours: 3.4 mg/l, Scenedesmus subspicatus
Chronic toxicity - aquatic invertebrates	NOEC, 21 days: 2.8 mg/l, Daphnia magna

C13-15 ALCOHOL ETHOXYLATE 7EO

Acute toxicity - fish	LC ₅₀ , 96 hours: 1-10 mg/l, Fish
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: 1 - 10 mg/l, Daphnia magna
Chronic toxicity - aquatic invertebrates	NOEC, : 0.1 - < 1 mg/l,

PROPAN-2-OL

Toxicity	Not considered toxic to fish.
Acute toxicity - fish	LC ₅₀ , 48 hours: >100 mg/l, Leuciscus idus (Golden orfe)
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: >100 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC ₅₀ , 72 hours: >100 mg/l, Scenedesmus subspicatus

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

Acute toxicity - fish	LC ₅₀ , 96 hours: 7.1 mg/l, Fish
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: 7.4 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC ₅₀ , 72 hours: 27.7 mg/l, Algae NOEC, 72 hours: 0.95 mg/l, Algae

12.2. Persistence and degradability

Persistence and degradability The surfactant(s) contained in this product complies(comply) 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.

Ecological information on ingredients.

ALCOHOLS C12 - 14 (7 - 7.5 EO)

Persistence and degradability	The surfactant(s) contained in this product complies(comply) 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.
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Biodegradation - Degradation (%) 90:
OECD 301

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 90 - 100%:
OECD 301A

PROPAN-2-OL

Persistence and degradability The substance is readily biodegradable.

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

Persistence and degradability The product is readily biodegradable.

Biodegradation - Degradation (%) 100: 28 days

12.3. Bioaccumulative potential

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

Partition coefficient Not determined.

Ecological information on ingredients.**ALCOHOLS C12 - 14 (7 - 7.5 EO)**

Bioaccumulative potential No data available on bioaccumulation. BCF: 12.7,

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.

PROPAN-2-OL

Bioaccumulative potential The product is not bioaccumulating.

Partition coefficient log Pow: 0.05

CAFLON LL50/E

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

12.4. Mobility in soil

Mobility The product is soluble in water.

Ecological information on ingredients.

ALCOHOLS C12 - 14 (7 - 7.5 EO)

Mobility The product is soluble in water.

C13-15 ALCOHOL ETHOXYLATE 7EO

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

PROPAN-2-OL

Mobility The product is soluble in water.

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

Mobility The product is soluble in water.

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.

ALCOHOLS C12 - 14 (7 - 7.5 EO)

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

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

PROPAN-2-OL

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.

CAFLON LL50/E**ALCOHOLS C12 - 14 (7 - 7.5 EO)**

Other adverse effects No information required.

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.

PROPAN-2-OL

Other adverse effects No data available.

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

General information 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.

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

CAFLON LL50/E

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) 2015/830 of 28 May 2015.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

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

CAFLON LL50/E

Classification abbreviations and acronyms	Acute Tox. = Acute toxicity Aquatic Acute = Hazardous to the aquatic environment (acute) Aquatic Chronic = Hazardous to the aquatic environment (chronic)
Revision comments	NOTE: Lines within the margin indicate significant changes from the previous revision.
Revision date	03/10/2016
Revision	02
Supersedes date	24/11/2013
SDS number	14915
Version number	2.000
SDS status	Approved.
Signature	Jitendra Panchal
Risk phrases in full	Not classified. R11 Highly flammable. R22 Harmful if swallowed. R35 Causes severe burns. R36 Irritating to eyes. R36/38 Irritating to eyes and skin. R37/38 Irritating to respiratory system and skin. R38 Irritating to skin. R41 Risk of serious damage to eyes. R42 May cause sensitisation by inhalation. R50 Very toxic to aquatic organisms. R67 Vapours may cause drowsiness and dizziness.
Hazard statements in full	H225 Highly flammable liquid and vapour. H290 May be corrosive to metals. H302 Harmful if swallowed. 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. H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled. H335 May cause respiratory irritation. H336 May cause drowsiness or dizziness. 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-BENZISOTHIAZOL-3(2H)-ONE. May produce an allergic reaction.