



SAFETY DATA SHEET CAFLON AOS 38

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

1.1. Product identifier

Product name	CAFLON AOS 38
Product number	10360
REACH registration number	01-2119513401-57-XXXX
CAS number	68439-57-6
EC number	931-534-0

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

Identified uses	Surfactant Detergent production Personal Care
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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
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1.4. Emergency telephone number

Emergency telephone	SGS - +32 (0)3 575 55 55 (24h)
Sds No.	10360

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards	Not Classified
Health hazards	Skin Irrit. 2 - H315 Eye Dam. 1 - H318
Environmental hazards	Not Classified

2.2. Label elements

EC number	931-534-0
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Hazard pictograms



Signal word	Danger
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CAFLON AOS 38

Hazard statements	H315 Causes skin irritation. H318 Causes serious eye damage.
Precautionary statements	P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P302+P352 IF ON SKIN: Wash with plenty of water. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

2.3. Other hazards

This substance is not classified as PBT or vPvB according to current EU criteria.

SECTION 3: Composition/information on ingredients

3.1. Substances

SODIUM ALPHA OLEFIN (C14-16) SULPHONATE			30-60%
CAS number: 68439-57-6	EC number: 931-534-0	REACH registration number: 01-2119513401-57-XXXX	
Acute Toxicity Estimate (oral):2079 mg/kg			
Acute Toxicity Estimate (dermal):6300 to 13500 mg/kg			
Acute Toxicity Estimate (inhalation):>52 mg/lVapour			
Skin Irrit. 2 - H315			
C ≥ 5%			
Eye Dam. 1 - H318			
C ≥ 38.001%			
Eye Irrit. 2 - H319			
5% ≤ C < 38.001%			
Classification			
Skin Irrit. 2 - H315			
Eye Dam. 1 - H318			

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

Product name	CAFLON AOS 38
REACH registration number	01-2119513401-57-XXXX
CAS number	68439-57-6
EC number	931-534-0
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. Do not induce vomiting. Rinse mouth thoroughly with water. Give plenty of water to drink. Get medical attention if any discomfort continues.
Skin contact	Rinse immediately with plenty of water. Remove contaminated clothing. 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 irritation persists after washing.

CAFLON AOS 38

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

Skin contact	Skin irritation.
Eye contact	Causes serious eye damage.

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

Notes for the doctor	Treat symptomatically.
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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.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products	Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours. Nitrous gases (NO _x).
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5.3. Advice for firefighters

Special protective equipment for firefighters	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.
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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions	Follow precautions for safe handling described in this safety data sheet. Provide adequate ventilation. Avoid contact with skin and eyes.
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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.
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6.3. Methods and material for containment and cleaning up

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

Reference to other sections	For personal protection, see Section 8.
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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions	Avoid spilling. Provide adequate ventilation. Avoid the formation of mists. Avoid contact with skin and eyes. Avoid heat, flames and other sources of ignition.
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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. Avoid contact with acids and alkalis. Avoid contact with strong oxidising agents. Store at temperatures between 15°C and 30°C.
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7.3. Specific end use(s)

Specific end use(s)	The identified uses for this product are detailed in Section 1.2.
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SECTION 8: Exposure controls/Personal protection

CAFLON AOS 38

8.1. Control parameters

Ingredient comments

No exposure limits known for ingredient(s).

SODIUM ALPHA OLEFIN (C14-16) SULPHONATE (CAS: 68439-57-6)

DNEL

Workers - Dermal; Long term systemic effects: 2158.33 mg/kg/day
 Workers - Inhalation; Long term systemic effects: 152.22 mg/m³
 Consumer - Dermal; Long term systemic effects: 1295 mg/kg/day
 Consumer - Oral; Long term systemic effects: 12.95 mg/kg/day

PNEC

marine water; 0.0042 mg/l
 Sediment (Marinewater); 0.2025 mg/kg
 Sediment (Freshwater); 2.025 mg/kg
 Soil; 0.0061 mg/kg
 Fresh water; 0.042 mg/l
 STP; 4 mg/l

8.2. Exposure controls

Protective equipment



Appropriate engineering controls

Provide adequate ventilation.

Eye/face protection

The following protection should be worn: Chemical splash goggles. Personal protective equipment for eye and face protection should comply with European Standard EN166.

Hand protection

The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. The selected gloves should have a breakthrough time of at least 8 hours. Nitrile rubber. Thickness: 0.11 mm To protect hands from chemicals, gloves should comply with European Standard EN374.

Hygiene measures

Provide eyewash station and safety shower. Wash at the end of each work shift and before eating, smoking and using the toilet.

Respiratory protection

If ventilation is inadequate, suitable respiratory protection must be worn. Gas filter, type A 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	Yellowish.
Odour	Mild.
Odour threshold	No information available.
pH	pH (diluted solution): 5.5 - 6.5 @ 10%
Melting point	< 0°C
Initial boiling point and range	> 100°C
Flash point	> 100°C

CAFLON AOS 38

Evaporation rate	No information available.
Evaporation factor	No information available.
Flammability (solid, gas)	No information available.
Upper/lower flammability or explosive limits	No information available.
Other flammability	No information available.
Vapour pressure	No information available.
Vapour density	No information available.
Relative density	No information available.
Bulk density	No information available.
Solubility(ies)	Soluble in water.
Partition coefficient	No information available.
Auto-ignition temperature	No information available.
Decomposition Temperature	No information available.
Viscosity	No information available.
Explosive properties	No information available.
Explosive under the influence of a flame	No information available.
Oxidising properties	No information available.

9.2. Other information

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	Stable at normal ambient temperatures and when used as recommended.
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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 heat, flames and other sources of ignition. Avoid freezing.
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CAFLON AOS 38

10.5. Incompatible materials

Materials to avoid Strong oxidising agents. Avoid contact with acids and alkalis.

10.6. Hazardous decomposition products

Hazardous decomposition products Does not decompose when used and stored as recommended. Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours. Nitrous gases (NO_x).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Skin corrosion/irritation

Skin corrosion/irritation Irritating to skin.

Serious eye damage/irritation

Serious eye damage/irritation Causes serious eye damage.

Respiratory sensitisation

Respiratory sensitisation No information available.

Skin sensitisation

Skin sensitisation Not sensitising.

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 Based on available data the classification criteria are not met.

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

The product irritates mucous membranes and may cause abdominal discomfort if swallowed.
Nausea, vomiting.

Skin contact

Causes skin irritation.

Eye contact

Causes serious eye damage.

Toxicological information on ingredients.

SODIUM ALPHA OLEFIN (C14-16) SULPHONATE

Acute toxicity - oral

Notes (oral LD₅₀) LD₅₀ 2079 mg/kg, Oral, Rat

Acute toxicity - dermal

CAFLON AOS 38

Notes (dermal LD₅₀)	LD ₅₀ 6300 - 13500 mg/kg, Dermal, Rabbit
<u>Acute toxicity - inhalation</u>	
Notes (inhalation LC₅₀)	LC ₅₀ >52 mg/l, Inhalation, Rat
<u>Skin corrosion/irritation</u>	
Skin corrosion/irritation	Causes skin irritation.
<u>Serious eye damage/irritation</u>	
Serious eye damage/irritation	Causes serious eye damage.
<u>Respiratory sensitisation</u>	
Respiratory sensitisation	No information available.
<u>Skin sensitisation</u>	
Skin sensitisation	Not sensitising. Guinea pig
<u>Germ cell mutagenicity</u>	
Genotoxicity - in vitro	Bacterial reverse mutation test: Negative. OECD 471 Chromosome aberration: Negative. OECD 473
<u>Carcinogenicity</u>	
Carcinogenicity	No information available.
<u>Reproductive toxicity</u>	
Reproductive toxicity - development	Teratogenicity: - NOAEL: 2 mg/kg, Oral, Rabbit
<u>Specific target organ toxicity - single exposure</u>	
STOT - single exposure	No information available.
<u>Specific target organ toxicity - repeated exposure</u>	
STOT - repeated exposure	No information available.
<u>Aspiration hazard</u>	
Aspiration hazard	No information available.
<u>Toxicokinetics</u>	
Toxicokinetics	The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.
Inhalation	Gas or vapour in high concentrations may irritate the respiratory system.
Ingestion	May cause discomfort if swallowed. Overexposure may cause the following adverse effects: Stomach pain.
Skin contact	Causes skin irritation. Overexposure may cause the following adverse effects: Pain or irritation. Redness. Blistering may occur.
Eye contact	Causes serious eye damage. May cause permanent damage if eye is not immediately irrigated. May cause chemical eye burns. Overexposure may cause the following adverse effects: Pain. Profuse watering of the eyes. Redness.

SECTION 12: Ecological information

CAFLON AOS 38

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.

SODIUM ALPHA OLEFIN (C14-16) SULPHONATE

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

12.1. Toxicity

Toxicity Not considered toxic to fish.

Ecological information on ingredients.

SODIUM ALPHA OLEFIN (C14-16) SULPHONATE

Toxicity There are no data on the ecotoxicity of this product.

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, 96 hours: 4.2 mg/l, Fish
OECD 203

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 4.53 mg/l, Daphnia magna
OECD 202

Acute toxicity - aquatic plants EC₅₀, 72 hours: 5.2 mg/l, Algae

Acute toxicity - microorganisms IC₅₀, 3 hours: 230 mg/l, Activated sludge
OECD 209

Chronic aquatic toxicity

Chronic toxicity - aquatic invertebrates NOEC, 21 days: 6.7 mg/l, Daphnia magna
OECD 211

12.2. Persistence and degradability

Persistence and degradability The product is biodegradable. This surfactant complies with the biodegradability criteria as laid down in Regulation (EC) No. 648/2004 on detergents.

Ecological information on ingredients.

SODIUM ALPHA OLEFIN (C14-16) SULPHONATE

Persistence and degradability The product is readily biodegradable.

Biodegradation - Degradation > 60%: 28 days
OECD 301B

12.3. Bioaccumulative potential

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

Partition coefficient No information available.

Ecological information on ingredients.

SODIUM ALPHA OLEFIN (C14-16) SULPHONATE

CAFLON AOS 38

Bioaccumulative potential Bioaccumulation is unlikely. BCF: 70.8,

Partition coefficient log Pow: -1.3

12.4. Mobility in soil

Mobility The product is soluble in water.

Ecological information on ingredients.

SODIUM ALPHA OLEFIN (C14-16) SULPHONATE

Mobility The product is soluble in water.

12.5. Results of PBT and vPvB assessment

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

Ecological information on ingredients.

SODIUM ALPHA OLEFIN (C14-16) SULPHONATE

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 None known.

Ecological information on ingredients.

SODIUM ALPHA OLEFIN (C14-16) SULPHONATE

Other adverse effects The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

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 contents/container in accordance with local regulations.

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.

CAFLON AOS 38

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

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.

15.2. Chemical safety assessment

A chemical safety assessment has been carried out.

Inventories

EU - EINECS/ELINCS

All the ingredients are listed or exempt.

SECTION 16: Other information

CAFLON AOS 38

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.

Revision comments

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

Revision date

26/09/2019

Version number

1.000

SDS number

58851

SDS status

Approved.

CAFLON AOS 38

Hazard statements in full	H315 Causes skin irritation. H318 Causes serious eye damage.
Signature	Jitendra Panchal