

# SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of: UK REACH Regulations (SI 2019/758 as amended)

Supercedes date 26-Apr-2018 Revision date 12-Sep-2023 Revision Number 3

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

1.1. Product identifier

Product Code(s) 10502

Safety data sheet number 10502

Product Name Sodium Lauryl Ether Sulfate (CAFLON 2L28U)

Synonyms DP28, CAFLON SLES28/N, CAFLON 2L28U RSPO MB, CAFLON 2L28 HA, CAFLON 2L28

HA RSPO MB, CAFLON 2L28C, CAFLON 2L28HV, CAFLON SLES LA

Pure substance/mixture Mixture

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

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

Recommended use surfactant

1.3. Details of the supplier of the safety data sheet

### **Supplier**

Fluid Science Limited Unit 3b Arbour Ct, Arbour Lane, Knowsley Industrial Park Kirkby L33 7XE

E-mail address sales@fluidscienceltd.com

Non-Emergency Telephone Number +44 (0) 1244 506 860

1.4. Emergency telephone number

Emergency Telephone 0870 190 6777 (National Chemical Emergency Centre) +44 (0)1270 502891

# **SECTION 2: Hazards identification**

### 2.1. Classification of the substance or mixture

Skin corrosion/irritation	Category 2 - (H315)
Serious eye damage/eye irritation	Category 1 - (H318)
Chronic aquatic toxicity	Category 3 - (H412)

# 2.2. Label elements

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



# Signal word

Danger

### **Hazard statements**

H315 - Causes skin irritation

H318 - Causes serious eye damage

H412 - Harmful to aquatic life with long lasting effects

### **Precautionary statements**

P264 - Wash face, hands and any exposed skin thoroughly after handling

P273 - Avoid release to the environment

P280 - Wear protective gloves and eye/face protection

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

P310 - Immediately call a POISON CENTER or doctor

P321 - Specific treatment (see .? on this label)

Unknown aquatic toxicity

Contains 0 % of components with unknown hazards to the aquatic environment.

# 2.3. Other hazards

No information available.

# **SECTION 3: Composition/information on ingredients**

# 3.1 Substances

Not applicable

### 3.2 Mixtures

Chemical name	Weight-%	EC No (EU	UK REACH registration	Classification according	Specific	M-Factor	M-Factor
		Index No)	number	to GB CLP (SI	concentration		(long-term)
				2020/1567 as	limit (SCL)		
				amended)			
ALCOHOLS,	20 - 30%	-	=	Aquatic Chronic 3	-	-	-
C12-14,				(H412)			
ETHOXYLATED,				Skin Irrit. 2 (H315)			
SULFATES,				Eye Dam. 1 (H318)			
SODIUM SALTS							
68891-38-3							
SODIUM	0 - 10%	215-185-5	-	Skin Corr. 1A (H314)	Eye Irrit. 2 ::	-	-
HYDROXIDE		(011-002-00		Met. Corr. 1 (H290)	0.5%<=C<2%		
1310-73-2		-6)		Eye Dam. 1 (H318)	Skin Corr. 1A ::		

	C>=5% Skin Corr. 1B ::	
	2%<=C<5%	
	Skin Irrit. 2 ::	
	0.5%<=C<2%	

### Full text of H- and EUH-phrases: see section 16

This product does not contain candidate substances of very high concern at a concentration >= 0.1% (UK REACH Article 59)

# **SECTION 4: First aid measures**

### 4.1. Description of first aid measures

General advice Immediate medical attention is required. Show this safety data sheet to the doctor in

attendance.

**Inhalation** Remove to fresh air. Get medical attention immediately if symptoms occur.

**Eye contact** Get immediate medical attention. Rinse immediately with plenty of water, also under the

eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue

rinsing. Keep eye wide open while rinsing. Do not rub affected area.

**Skin contact** Wash off immediately with soap and plenty of water for at least 15 minutes. Get medical

attention if irritation develops and persists.

Ingestion Rinse mouth. Never give anything by mouth to an unconscious person. Do NOT induce

vomiting. Call a doctor.

**Self-protection of the first aider** Avoid contact with skin, eyes or clothing. Wear personal protective clothing (see section 8).

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

**Symptoms** Burning sensation.

**Eves** Causes serious eye damage.

**Dermal** Prolonged contact may cause redness and irritation.

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

**Note to doctors** Treat symptomatically.

# **SECTION 5: Firefighting measures**

# 5.1. Extinguishing media

**Suitable Extinguishing Media** Dry chemical, CO2, alcohol-resistant foam or water spray.

Large Fire CAUTION: Use of water spray when fighting fire may be inefficient.

**Unsuitable extinguishing media** Do not scatter spilled material with high pressure water streams.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products Oxides of sulphur.

### 5.3. Advice for firefighters

Special protective equipment and precautions for fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

# 6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with skin, eyes or clothing. Use personal protective equipment as required.

Ensure adequate ventilation.

**Other information** Refer to protective measures listed in Sections 7 and 8.

6.2. Environmental precautions

**Environmental precautions** Prevent further leakage or spillage if safe to do so.

6.3. Methods and material for containment and cleaning up

SECTION 6: Accidental release measures

**Methods for containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up**Absorb with earth, sand or other non-combustible material and transfer to containers for

later disposal. Flush area with flooding quantities of water. Collect with absorbent,

non-combustible material into suitable containers.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections

**Reference to other sections** See section 8 for more information. See section 13 for more information.

# **SECTION 7: Handling and storage**

### 7.1. Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice. Avoid contact with

skin, eyes or clothing. Do not eat, drink or smoke when using this product. Take off

contaminated clothing and wash it before reuse.

General hygiene considerations Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do

not eat, drink or smoke when using this product.

### 7.2. Conditions for safe storage, including any incompatibilities

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place. Store locked up.

Keep out of the reach of children.

### 7.3. Specific end use(s)

# Specific use(s)

See section 1 for more information.

Risk Management Methods (RMM) The information required is contained in this Safety Data Sheet.

# **SECTION 8: Exposure controls/personal protection**

# 8.1. Control parameters

# **Exposure Limits**

Chemical name	United Kingdom
SODIUM HYDROXIDE	STEL: 2 mg/m <sup>3</sup>
1310-73-2	

Biological occupational exposure limits

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

# **Derived No Effect Level (DNEL) - Workers**

Chemical name	Oral	Dermal	Inhalation
ALCOHOLS, C12-14, ETHOXYLATED,		2750 mg/kg/day [4] [6]	175 mg/m³ [4] [6]
SULFATES, SODIUM SALTS			-
68891-38-3			
SODIUM HYDROXIDE		2 mg/kg/day [5] [7]	1 mg/m³ [5] [6]
1310-73-2			

[4] Systemic health effects.
[5] Local health effects.
[6] Long term.
[7] Short term.

# Derived No Effect Level (DNEL) - General Public

Chemical name	Oral	Dermal	Inhalation
ALCOHOLS, C12-14, ETHOXYLATED,	15 mg/kg/day [4] [6]	1650 mg/kg/day [4] [6]	52 mg/m³ [4] [6]
SULFATES, SODIUM SALTS			
68891-38-3			
SODIUM HYDROXIDE			1 mg/m³ [5] [6]
1310-73-2			

[4] Systemic health effects.[5] Local health effects.[6] Long term.

# **Predicted No Effect Concentration (PNEC)**

Chemical name	Freshwater	Freshwater	Marine water	Marine water	Air
		(intermittent release)		(intermittent release)	
ALCOHOLS, C12-14,	0.24 mg/l	0.071 mg/L	0.024 mg/l		
ETHOXYLATED,					
SULFATES, SODIUM					
SALTS					
68891-38-3					

Chemical name	Freshwater sediment	Marine sediment	Sewage treatment	Soil	Food chain
ALCOHOLS, C12-14, ETHOXYLATED, SULFATES, SODIUM SALTS 68891-38-3	5.45 mg/kg	0.545 mg/kg	10 g/L	0.946 mg/kg	10000 mg/l

8.2. Exposure controls

**Engineering controls** No information available.

Personal protective equipment

**Eye/face protection** Tight sealing safety goggles. Wear safety glasses with side shields (or goggles). Use eye

protection according to EN 166.

Hand protection Wear suitable gloves. Impervious gloves. Ensure that the breakthrough time of the glove

material is not exceeded. Refer to glove supplier for information on breakthrough time for specific gloves. Wear protective butyl rubber gloves. Nitrile rubber. Neoprene gloves.

Gloves must conform to standard EN 374.

**Skin and body protection** Wear suitable protective clothing. Long sleeved clothing.

Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are

exceeded or irritation is experienced, ventilation and evacuation may be required.

**General hygiene considerations** Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do

not eat, drink or smoke when using this product.

# SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical stateLiquidAppearanceLiquidColourColourlessOdourMild.

Odour threshold No information available

<u>Property</u> <u>Values</u> <u>Remarks • Method</u>

Melting point / freezing point < 0 °C

Initial boiling point and boiling range~ 100 °C ~100°C

Flammability No information available Flammability Limit in Air No information available

Upper flammability or explosive

limits

Lower flammability or explosive

limits

Flash point > 125 °C

Autoignition temperatureNo information availableDecomposition temperatureNo information available

**pH** 11

pH (as aqueous solution)

Kinematic viscosity

No information available
No information available

**Dynamic viscosity** 100 cP @ 20 °C

Water solubility
Soluble in water
No information available

Partition coefficientNo information availableVapour pressureNo information availableRelative density1.0420 °C

Bulk density 1.04 20°

No information available
No information available
Particle characteristics
Particle Size

Particle Size Distribution

Explosive properties No information available Oxidising properties No information available

9.2. Other information

# SECTION 10: Stability and reactivity

10.1. Reactivity

**Reactivity** Stable under recommended storage conditions.

10.2. Chemical stability

**Stability** Stable under normal conditions.

**Explosion data** 

Sensitivity to mechanical impact None. Sensitivity to static discharge None.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions 
None under normal processing.

10.4. Conditions to avoid

Conditions to avoid None known based on information supplied.

10.5. Incompatible materials

**Incompatible materials** Strong acids. Strong bases. Strong oxidising agents.

10.6. Hazardous decomposition products

Hazardous decomposition products Carbon oxides. Oxides of sulphur.

# SECTION 11: Toxicological information

11.1. Information on toxicological effects

Information on likely routes of exposure

**Product Information** 

**Inhalation** Specific test data for the substance or mixture is not available. May cause irritation of

respiratory tract. May cause irritation.

Eye contact Specific test data for the substance or mixture is not available. Causes serious eye damage.

May cause irreversible damage to eyes. Causes serious eye damage.

Skin contact Specific test data for the substance or mixture is not available. Causes skin irritation. (based

on components). Causes skin irritation.

**Ingestion** Specific test data for the substance or mixture is not available. Ingestion may cause

gastrointestinal irritation, nausea, vomiting and diarrhoea. Ingestion may cause

gastrointestinal irritation, nausea, vomiting and diarrhoea.

Symptoms related to the physical, chemical and toxicological characteristics

**Symptoms** Redness. Burning. May cause blindness. May cause redness and tearing of the eyes.

Acute toxicity

**Numerical measures of toxicity** 

The following values are calculated based on chapter 3.1 of the GHS document

**Component Information** 

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
ALCOHOLS, C12-14,	-	> 2000 mg/kg (Rat)	-
ETHOXYLATED, SULFATES,			
SODIUM SALTS			
SODIUM HYDROXIDE	= 325 mg/kg (Rat)	= 1350 mg/kg (Rabbit)	-

# Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation Classification based on data available for ingredients. Causes skin irritation. Causes skin

irritation.

Serious eye damage/eye irritation Classification based on data available for ingredients. Causes burns. Causes serious eye

damage. Causes serious eye damage.

**Respiratory or skin sensitisation** No information available.

**Germ cell mutagenicity**No information available.

**Carcinogenicity** No information available.

**Reproductive toxicity** No information available.

**STOT - single exposure** No information available.

**STOT - repeated exposure** No information available.

**Aspiration hazard** No information available.

Other adverse effects No information available.

# **SECTION 12: Ecological information**

### 12.1. Toxicity

**Ecotoxicity** Harmful to aquatic life with long lasting effects.

**Unknown aquatic toxicity**Contains 0 % of components with unknown hazards to the aquatic environment.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
SODIUM HYDROXIDE	•	LC50: =45.4mg/L (96h,	-	-
		Oncorhynchus mykiss)		

### 12.2. Persistence and degradability

Persistence and degradability 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.

### 12.3. Bioaccumulative potential

**Bioaccumulation** No information available.

**Component Information** 

Chemical name	Partition coefficient
ALCOHOLS, C12-14, ETHOXYLATED, SULFATES, SODIUM	0.3
SALTS	

### 12.4. Mobility in soil

Mobility in soil Soluble in water.

### 12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment The product does not contain any substance(s) classified as PBT or vPvB.

Chemical name	PBT and vPvB assessment
ALCOHOLS, C12-14, ETHOXYLATED, SULFATES, SODIUM SALTS	The substance is not PBT / vPvB PBT assessment does
	not apply
SODIUM HYDROXIDE	The substance is not PBT / vPvB PBT assessment does
	not apply

# 12.6. Other adverse effects

No information available.

# SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Waste from residues/unused products

Dispose of in accordance with local regulations. Dispose of waste in accordance with

environmental legislation.

**Contaminated packaging** Do not reuse empty containers.

# SECTION 14: Transport information

А	I	ŀ	١	

14.1UN number or ID numberNot regulated14.2UN proper shipping nameNot regulated14.3Transport hazard class(es)Not regulated14.4Packing groupNot regulated14.5Environmental hazardsNot applicable

14.6 Special precautions for user

Special Provisions None

IMDG

14.1 UN number or ID number
 14.3 Transport hazard class(es)
 14.4 Packing group
 14.5 Environmental hazards
 Not regulated Not regulated Not applicable

14.6 Special precautions for user

Special Provisions None

**14.7 Maritime transport in bulk** No information available

according to IMO instruments

RID

14.1 UN number or ID number
14.2 UN proper shipping name
14.3 Transport hazard class(es)
14.4 Packing group
14.5 Environmental hazards

Not regulated
Not regulated
Not regulated
Not applicable

14.6 Special precautions for user

Special Provisions None

ADR

14.1 UN number or ID number
14.2 UN proper shipping name
14.3 Transport hazard class(es)
14.4 Packing group
14.5 Environmental hazards
Not regulated
Not regulated
Not regulated
Not applicable

14.6 Special precautions for user

Special Provisions None

# SECTION 15: Regulatory information

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

### National regulations

### Authorisations and/or restrictions on use:

This product contains one or more substances subject to restriction (UK REACH - Annex XVII). This product does not contain substances subject to authorisation (UK REACH - Annex XIV).

#### **Persistent Organic Pollutants**

Not applicable

### **Export Notification requirements**

Not applicable

Named dangerous substances per COMAH Regulations 2015 (as amended)

Not applicable

### The Ozone-Depleting Substances Regulations 2015

Not applicable

### The Biocidal Products Regulations 2001 (as amended)

Not applicable

# The Water Environment (Water Framework Directive) (England and Wales) Regulations 2017 (as amended)

Not applicable

### Poisons Act 1972 (Explosive Precursors) Regulations (as Amended)

Chemical name	Poisons and Explosive Precursors
SODIUM HYDROXIDE	Poison, Reportable 12 % of total caustic alkalinity

### **International Inventories**

TSCA	Contact supplier for inventory compliance status
DSL/NDSL	Contact supplier for inventory compliance status
EINECS/ELINCS	Contact supplier for inventory compliance status
ENCS	Contact supplier for inventory compliance status
IECSC	Contact supplier for inventory compliance status
KECL	Contact supplier for inventory compliance status
PICCS	Contact supplier for inventory compliance status
AIIC	Contact supplier for inventory compliance status
NZIoC	Contact supplier for inventory compliance status

### Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

**ENCS** - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

**AllC** - Australian Inventory of Industrial Chemicals **NZIoC** - New Zealand Inventory of Chemicals

### 15.2. Chemical safety assessment

Chemical Safety Report No information available

# **SECTION 16: Other information**

# Key or legend to abbreviations and acronyms used in the safety data sheet

### Full text of H-Statements referred to under section 3

H290 - May be corrosive to metals

H314 - Causes severe skin burns and eye damage

H315 - Causes skin irritation

H318 - Causes serious eye damage

H412 - Harmful to aquatic life with long lasting effects

# Legend

SVHC: Substances of Very High Concern for Authorisation:

Legend Section 8: Exposure controls/personal protection

TWA TWA (time-weighted average) STEL STEL (Short Term Exposure Limit)

Ceiling Maximum limit value \* Skin designation

+ Sensitisers

Revision Note \*\*\*Indicates updated data since last publication

Classification according to Regulation (EC) No. 1272/2008 [CLP] Method Used Acute oral toxicity Calculation method Acute dermal toxicity Calculation method Acute inhalation toxicity - gas Calculation method Acute inhalation toxicity - vapour Acute inhalation toxicity - dust/mist Calculation method Calculation method Skin corrosion/irritation Calculation method Serious eye damage/eye irritation Calculation method Respiratory sensitisation Calculation method Calculation method Skin sensitisation Mutagenicity Calculation method Carcinogenicity Calculation method Reproductive toxicity Calculation method STOT - single exposure Calculation method STOT - repeated exposure Calculation method Acute aquatic toxicity Calculation method Chronic aquatic toxicity Calculation method Aspiration hazard Calculation method Ozone Calculation method

### Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)

U.S. Environmental Protection Agency ChemView Database

European Food Safety Authority (EFSA)

European Chemicals Agency (ECHA) Committee for Risk Assessment (ECHA\_RAC)

European Chemicals Agency (ECHA) (ECHA\_API)

EPA (Environmental Protection Agency)

Acute Exposure Guideline Level(s) (AEGL(s))

U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act

U.S. Environmental Protection Agency High Production Volume Chemicals

Food Research Journal

Hazardous Substance Database

International Uniform Chemical Information Database (IUCLID)

National Institute of Technology and Evaluation (NITE)

Australian National Industrial Chemicals Notification and Assessment Scheme (NICNAS)

NIOSH (National Institute for Occupational Safety and Health)

National Library of Medicine's ChemID Plus (NLM CIP)

National Library of Medicine's PubMed database (NLM PUBMED)

National Toxicology Program (NTP)

New Zealand's Chemical Classification and Information Database (CCID)

Organisation for Economic Co-operation and Development Environment, Health, and Safety Publications

Organisation for Economic Co-operation and Development High Production Volume Chemicals Programme

Organisation for Economic Co-operation and Development Screening Information Data Set

World Health Organization

**Supercedes date** 26-Apr-2018

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This material safety data sheet complies with the requirements of UK REACH Regulations (SI 2019/758 as amended)
Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical

# agents at work

#### **Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**