

SAFETY DATA SHEET

Sentinel X800

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

1.1. Product identifier

Trade name Sentinel X800 Product no.

12301-0003

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

Relevant identified uses of the substance or mixture

Rapid cleaner for older systems

Uses advised against

None known.

1.3. Details of the supplier of the safety data sheet

Company and address

Sentinel Performance Solutions Ltd

7650 Daresbury Park Daresbury WA4 4BS Warrington United Kingdom T- +44 (0)1928 704 330

F- +44 (0)1928 562 070

Contact person

Customer Services

E-mail

customer.services@sentinelprotects.com

Revision

14/05/2025

SDS Version

1.0

1.4. Emergency telephone number

+44 (0)1928 704 320

Healthcare professionals: Dial 0344 892 0111 to reach The National Poisons Information Service (NPIS) (24 hour service)

General public:

England - Dial 111 to reach NHS 111 (24 hour service)

Scotland - Dial 112 to reach NHS 24 (24 hour service)

Wales - Dial 111 or 0845 4647 to reach NHS Direct (24 hour service)

See section 4 "First aid measures".

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Not classified according to Regulation (EC) No. 1272/2008 (CLP) as retained and amended in UK law.

2.2. Label elements

Hazard pictogram(s)

Not applicable.

Signal word

Not applicable.

Hazard statement(s)

Not applicable.



Precautionary statement(s)

General

-

Prevention

-

Response

-

Storage

-

Disposal

Hazardous substances

Does not contain any substances required to report

Additional labelling

EUH210, Safety data sheet available on request.

2.3. Other hazards

Additional warnings

This mixture/product does not contain any substances known to fulfil the criteria for PBT and vPvB classification. This product does not contain any substances considered to be endocrine disruptors in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2023/707.

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable. This product is a mixture.

3.2. Mixtures

Product/substance	Identifiers	% w/w	Classification	Note
methanesulphonic acid	CAS No.: 75-75-2 EC No.: 200-898-6 UK-REACH: Index No.: 607-145-00-4	3-5%	Met. Corr. 1, H290 Acute Tox. 4, H302 Acute Tox. 4, H312 Skin Corr. 1B, H314 Eye Dam. 1, H318 STOT SE 3, H335	
potassium hydroxide;caustic potash	CAS No.: 1310-58-3 EC No.: 215-181-3 UK-REACH: Index No.: 019-002-00-8	1-3%	Acute Tox. 4, H302 Skin Corr. 1A, H314 Skin Corr. 1B, H314 (SCL: 2.00 %) Skin Irrit. 2, H315 (SCL: 0.50 %) Eye Irrit. 2, H319 (SCL: 0.50 %)	
sodium hydroxide;caustic soda	CAS No.: 1310-73-2 EC No.: 215-185-5 UK-REACH: Index No.: 011-002-00-6	<0.05%	Met. Corr. 1, H290 Skin Corr. 1A, H314	

See full text of H-phrases in section 16. Occupational exposure limits are listed in section 8, if these are available.

Other information

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

In the case of accident: Contact a doctor or casualty department – take the label or this safety data sheet.



Contact a doctor if in doubt about the injured person's condition or if the symptoms persist. Never give an unconscious person water or other drink.

Inhalation

Upon breathing difficulties or irritation of the respiratory tract: Bring the person into fresh air and stay with him/her.

Skin contact

Upon irritation: rinse with water. In the event of continued irritation, seek medical assistance.

Eve contact

If in eyes: Flush eyes with water or saline water (20-30 °C) for at least 5 minutes. Remove contact lenses. Seek medical assistance and continue flushing during transport.

Ingestion

If the person is conscious, rinse the mouth with water and stay with the person. Never give the person anything to drink.

In case of malaise, seek medical advice immediately and bring the safety data sheet or label from the product. Do not induce vomiting, unless recommended by the doctor. Have the person lean forward with head down to avoid inhalation of or choking on vomited material.

Burns

Not applicable.

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

None known.

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

Treat symptomatically.

Information to medics

Bring this safety data sheet or the label from this product.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Not applicable.

5.2. Special hazards arising from the substance or mixture

Fire will result in dense smoke. Exposure to combustion products may harm your health. Closed containers, which are exposed to fire, should be cooled with water. Do not allow fire-extinguishing water to enter the sewage system and nearby surface waters.

If the product is exposed to high temperatures, e.g. in the event of fire, dangerous decomposition compounds are produced. These are:

Sulphur oxides

Nitrogen oxides (NO_x)

Carbon oxides (CO / CO2)

Some metal oxides

5.3. Advice for firefighters

No specific requirements.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation, especially in confined areas.

Contaminated areas may be slippery.

6.2. Environmental precautions

Avoid discharge to lakes, streams, sewers, etc.

Keep unauthorized persons away from the spill

6.3. Methods and material for containment and cleaning up

Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.

Wherever possible cleaning should be performed with normal cleaning agents. Avoid use of solvents.

6.4. Reference to other sections

See section 13 "Disposal considerations" on handling of waste.

See section 8 "Exposure controls/personal protection" for protective measures.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid contact during pregnancy and while nursing.

Smoking, drinking and consumption of food is not allowed in the work area.

See section 8 "Exposure controls/personal protection" for information on personal protection.

7.2. Conditions for safe storage, including any incompatibilities

Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

Recommended storage material

Always store in containers of the same material as the original container.

Storage conditions

< 50°C

Dry, cool and well ventilated

Incompatible materials

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

7.3. Specific end use(s)

This product should only be used for applications quoted in section 1.2.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

potassium hydroxide; caustic potash

Short term exposure limit (15 minutes) (mg/m³): 2

sodium hydroxide; caustic soda

Short term exposure limit (15 minutes) (mg/m³): 2

The Control of Substances Hazardous to Health Regulations 2002. SI 2002/2677 The Stationery Office 2002. EH40/2005 Workplace exposure limits (Fourth Edition 2020).

DNEL

methanesulphonic acid

Duration:	Route of exposure:	DNEL:
Long term – Systemic effects - General population	Dermal	8.33 mg/kg bw/day
Long term – Systemic effects - Workers	Dermal	19.44 mg/kg bw/day
Long term – Local effects - General population	Inhalation	420 μg/m³
Long term – Local effects - Workers	Inhalation	700 μg/m³
Long term – Systemic effects - General population	Inhalation	1.44 mg/m³
Long term – Systemic effects - Workers	Inhalation	6.76 mg/m³
Long term – Systemic effects - General population	Oral	8.33 mg/kg bw/day

potassium hydroxide; caustic potash

Duration:	Route of exposure:	DNEL:
Long term – Local effects - General population	Inhalation	1 mg/m³
Long term – Local effects - Workers	Inhalation	1 mg/m³

sodium hydroxide;caustic soda

Duration:	Route of exposure:	DNEL:
Long term – Local effects - General population	Inhalation	1 mg/m³
Long term – Local effects - Workers	Inhalation	1 mg/m³

PNEC

methanesulphonic acid



Route of exposure:	Duration of Exposure:	PNEC:
Freshwater		12 μg/L
Freshwater sediment		44.4 μg/kg
Intermittent release (freshwater)		120 μg/L
Marine water		1.2 μg/L
Marine water sediment		4.44 μg/kg
Sewage treatment plant		100 mg/L
Soil		1.83 μg/kg

8.2. Exposure controls

Compliance with the given occupational exposure limits values should be controlled on a regular basis.

General recommendations

Smoking, drinking and consumption of food is not allowed in the work area.

Exposure scenarios

There are no exposure scenarios implemented for this product.

Exposure limits

Professional users are subjected to the legally set maximum concentrations for occupational exposure. See occupational hygiene limit values above.

Appropriate technical measures

The formation of vapours must be kept at a minimum and below current limit values (see above). Installation of a local exhaust system if normal air flow in the work room is not sufficient is recommended. Ensure eyewash and emergency showers are clearly marked.

Apply standard precautions during use of the product. Avoid inhalation of vapours.

Hygiene measures

In between use of the product and at the end of the working day all exposed areas of the body must be washed thoroughly. Pay special attention to hands, forearms and face.

Measures to avoid environmental exposure

No specific requirements.

Individual protection measures, such as personal protective equipment

Generally

Wash contaminated clothing before reuse.

Use only UKCA marked protective equipment.

Respiratory Equipment

No specific requirements

Skin protection

Recommended	Type/Category	Standards	
Dedicated work clothing should be worn.	-	-	R



Material	Glove thickness (mm)	Breakthrough time (min.)	Standards
Chemically resistant protective gloves. EN 374	-	-	-

Eye protection

Type	Standards	
Safety glasses	EN166	

SECTION 9: Physical and chemical properties



9.1. Information on basic physical and chemical properties

Physical state

Liquid

Colour

Clear, Colourless, Pale yellow

Odour / Odour threshold

No data available.

рΗ

7.4 - 8.0

Density (g/cm³)

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Relative density

1.058 - 1.068 (25 °C)

Kinematic viscosity

No data available.

Particle characteristics

Does not apply to liquids.

Phase changes

Melting point/Freezing point (°C)

-11 to -10

Softening point/range (°C)

Does not apply to liquids.

Boiling point (°C)

No data available.

Vapour pressure

No data available.

Relative vapour density

No data available.

Decomposition temperature (°C)

No data available.

Data on fire and explosion hazards

Flash point (°C)

No data available.

Flammability (°C)

No data available.

Auto-ignition temperature (°C)

No data available.

Lower and upper explosion limit (% v/v)

No data available.

Solubility

Solubility in water

No data available.

n-octanol/water coefficient (LogKow)

No data available.

Solubility in fat (g/L)

No data available.

9.2. Other information

Oxidizing properties

No data available.

Other physical and chemical parameters

No data available.

SECTION 10: Stability and reactivity

10.1. Reactivity

No data available.

10.2. Chemical stability

The product is stable under the conditions, noted in section 7 "Handling and storage".



10.3. Possibility of hazardous reactions

None known.

10.4. Conditions to avoid

None known.

10.5. Incompatible materials

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008 as retained and amended in UK

Acute toxicity

Product/substance methanesulphonic acid

Test method: **OECD 401** Species: Rat Route of exposure: Oral LD50 Test:

Result: 300-2000 mg/kg

Product/substance methanesulphonic acid

Test method: **OFCD 402** Rabbit Species: Route of exposure: Dermal Test: LD50

Result: 1000-2000 mg/kg

Product/substance methanesulphonic acid

Species: Rat Route of exposure: Oral Test: LD50 Result: 649 mg/kg

Product/substance methanesulphonic acid

Species: Rat Route of exposure: Inhalation Test: LC50 (vapour) Result: 1.3 mg/l 330 ppm 6 h

Product/substance methanesulphonic acid

Species: Mouse Route of exposure: Inhalation

Test: LC0

Result: > 1.88 mg/m3 1 h (IHT)

Product/substance methanesulphonic acid

Test method: **OECD 402** Species: Rabbit Route of exposure: Dermal LD50 Test: Result: <2000 mg/kg

Product/substance potassium hydroxide; caustic potash

Species: Rat Route of exposure: Oral Test: LD50

Result: 333-384 mg/kg

Product/substance sodium hydroxide; caustic soda

Test method: **OECD 401** Species: Rabbit



According to REACH Regulation (EC) No 1907/2006, as retained and amended by SI 2019/758 and SI 2020/1577 Product no.: 12301-0003

Route of exposure: Oral
Test: LD50
Result: 500 mg/kg

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

Skin corrosion/irritation

Product/substance methanesulphonic acid

Description: Corrosive! Damages skin and eyes.

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

Serious eye damage/irritation

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

Respiratory sensitisation

Product/substance methanesulphonic acid

Test method: OECD 406 Species: Guinea pig

Description: Skin sensitizing effects were not observed in animal studies.

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

Skin sensitisation

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

Germ cell mutagenicity

Product/substance methanesulphonic acid

Description: The substance was not mutagenic in mammalian cell culture. The substance was not mutagenic in

bacteria. The substance was not mutagenic in a test with mammals.

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

Carcinogenicity

Product/substance methanesulphonic acid

Result: Study does not need to be conducted. The whole of the information assessable provides no indication

of a carcinogenic effect.

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

Reproductive toxicity

Product/substance methanesulphonic acid

Result: The results of animal studies gave no indication of a fertility impairing effect.

Product/substance methanesulphonic acid

Result: In animal studies the substance did not cause malformations.

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

STOT-single exposure

Product/substance methanesulphonic acid

Result: Causes temporary irritation of the respiratory tract.

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

STOT-repeated exposure

Product/substance methanesulphonic acid

Species: Rat

Result: After repeated exposure the prominent effect is local irritation. The substance may cause damage to

the olfactory epithelium after repeated inhalation. Prolonged repeated exposure caused inflammable

degenerative processes in the respiratory tract of rats.

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

Aspiration hazard

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

11.2. Information on other hazards

Long term effects

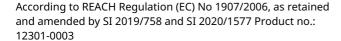
None known.

Endocrine disrupting properties

This mixture/product does not contain any substances known to have hormone-disrupting properties in relation to health.

Other information

None known.





SECTION 12: Ecological information

12.1. Toxicity

Product/substance methanesulphonic acid

Result: Acutely harmful for aquatic organisms. The inhibition of the degradation activity of activated sludge is

not anticipated when introduced to biological treatment plants in appropriate low concentrations.

Product/substance methanesulphonic acid

Test method: OECD 203

Species: Fish, Oncorhynchus mykiss

 Duration:
 96 hours

 Test:
 LC50

 Result:
 10-100 mg/L

Product/substance methanesulphonic acid

Test method: OECD 202

Species: Daphnia, Daphnia magna

 Duration:
 48 hours

 Test:
 EC50

 Result:
 10-100 mg/L

Product/substance methanesulphonic acid

Test method: OECD 201

Species: Selenastrum capricornutum

 Duration:
 72 hours

 Test:
 EC50

 Result:
 10-100 mg/L

Product/substance methanesulphonic acid Test method: OECD 203

Species: Oncorhynchus mykiss

Duration: 96 hours
Test: LC50
Result: 73 mg/L

Product/substance methanesulphonic acid

Test method: OECD 202

Species: Daphnia, Daphnia magna

Duration: 48 hours
Test: EC50
Result: 70 mg/L

Product/substance methanesulphonic acid

Test method: OECD 201

Species: Algae, Selenastrum capricornutum

Duration: 72 hours
Test: EC50
Result: 12-24 mg/L

Product/substance sodium hydroxide;caustic soda

Species: Fish
Duration: 96 hours
Test: LC50
Result: 55.6 mg/L

Product/substance sodium hydroxide;caustic soda Species: Daphnia, Daphnia magna

 Duration:
 48 hours

 Test:
 EC50

 Result:
 40-240 mg/L

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Product/substance sodium hydroxide; caustic soda

Test method: OECD 203

Species: Fish, Oncorhynchus mykiss

Duration: 96 hours
Test: LC50
Result: 45.5 mg/L

Product/substance sodium hydroxide; caustic soda

Test method: OECD 203

Species: Fish, Gambusia affinis

Duration: 96 hours
Test: LC50
Result: 125 mg/L

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

12.2. Persistence and degradability

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

12.3. Bioaccumulative potential

Product/substance methanesulphonic acid

Conclusion: Bioaccumulation is not expected

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

This mixture/product does not contain any substances known to fulfil the criteria for PBT and vPvB classification.

12.6. Endocrine disrupting properties

This mixture/product does not contain any substances considered to have endocrine-disrupting properties in relation to the environment.

12.7. Other adverse effects

None known.

SECTION 13: Disposal considerations

Waste treatment methods

Product is covered by the regulations on hazardous waste.

HP 8 - Corrosive

Regulation (EU) No 1357/2014 of 18 December 2014 on waste as retained and amended in UK law.

EWC code

Not applicable.

Specific labelling

Contaminated packing

Packaging containing residues of the product must be disposed of similarly to the product.

SECTION 14: Transport information

	14.1 UN / IC	14.2 O UN proper shipping name	14.3 Hazard class(es)	14.4 PG*	14.5 Env**	Other informatio n:
ADR	-	-	-	-	-	-
IMDG	-	-	-	-	-	-
IATA	-	-	-	-	-	-

^{*} Packing group

Additional information

Not dangerous goods according to ADR, IATA and IMDG.

14.6. Special precautions for user

^{**} Environmental hazards



Not applicable.

14.7. Maritime transport in bulk according to IMO instruments

No data available.

SECTION 15: Regulatory information

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

Restrictions for application

Pregnant women and women breastfeeding must not be exposed to this product. The risk, and possible technical precautions or design of the workplace needed to eliminate exposure, must be considered.

Demands for specific education

No specific requirements.

Control of Major Accident Hazards (COMAH) - Categories / dangerous substances

Not applicable.

Additional information

Not applicable.

Sources

The Health and Safety at Work etc. Act 1974 Regulations 2013.

Regulation (EU) No 1357/2014 of 18 December 2014 on waste as retained and amended in UK law.

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures (CLP) as retained and amended in UK law.

Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) as retained and amended in UK law.

15.2. Chemical safety assessment

No

SECTION 16: Other information

Full text of H-phrases as mentioned in section 3

H290, May be corrosive to metals.

H302, Harmful if swallowed.

H312, Harmful in contact with skin.

H314, Causes severe skin burns and eye damage.

H315, Causes skin irritation.

H318, Causes serious eye damage.

H319, Causes serious eye irritation.

H335, May cause respiratory irritation.

Abbreviations and acronyms

ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway

ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road

ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

CAS = Chemical Abstracts Service

CE = Conformité Européenne (European conformity)

CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]

CSA = Chemical Safety Assessment

CSR = Chemical Safety Report

DMEL = Derived Minimal Effect Level

DNEL = Derived No Effect Level

EINECS = European Inventory of Existing Commercial chemical Substances

ES = Exposure Scenario

EUH statement = CLP-specific Hazard statement

EuPCS = European Product Categorisation System

EWC = European Waste Catalogue

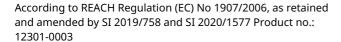
GHS = Globally Harmonized System of Classification and Labelling of Chemicals

GWP = Global warming potential

IARC = International Agency for Research on Cancer (IARC)

IATA = International Air Transport Association

IBC = Intermediate Bulk Container





IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

OECD = Organisation for Economic Co-operation and Development

PBT = Persistent, Bioaccumulative and Toxic

PNEC = Predicted No Effect Concentration

RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail

RRN = REACH Registration Number

SCL = A specific concentration limit

SVHC = Substances of Very High Concern

STOT-RE = Specific Target Organ Toxicity - Repeated Exposure

STOT-SE = Specific Target Organ Toxicity - Single Exposure

TWA = Time weighted average

UN = United Nations

UVBC = Unknown or variable composition, complex reaction products or of biological materials

VOC = Volatile Organic Compound

vPvB = Very Persistent and Very Bioaccumulative

Additional information

Not applicable.

The safety data sheet is validated by

ADB

Other

A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a triangle.

The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products.

It is recommended to hand over this safety data sheet to the actual user of the product. Information in this safety data sheet cannot be used as a product specification.

Country-language: GB-en