



Sentinel X900 Filter Aid

Safety Data Sheet

according to Regulation (EC) No. 453/2010

Date of issue: 01 June 2017

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Version: 3.2

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

1.1. Product identifier

Product form : Mixture
Product name : Sentinel X900 Filter Aid

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

1.2.1. Relevant identified uses

Main use category : Filtration enhancer for central heating systems filters

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

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
info.uk@sentinelprotects.com

1.4. Emergency telephone number

Emergency number : +44 (0) 1928 704 339
(24 hours, 7 days)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Not classified

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

No labelling applicable

2.3. Other hazards

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

Other hazards not contributing to the classification : May cause eye irritation. Repeated or prolonged contact may cause skin irritation. Ingestion may cause irritation of the gastrointestinal tract.

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Potassium hydroxide	(CAS No.) 1310-58-3 (EC No.) 215-181-3 (EC index No.) 019-002-00-8 (REACH-no) 01-2119487136-33-XXXX	< 0.5	Acute Tox. 4 (Oral), H302 Skin Corr. 1A, H314

Full text of H-phrases: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation : Remove to fresh air, keep the patient warm and at rest. If symptoms develop obtain medical attention.

Sentinel X900 Filter Aid

Safety Data Sheet

according to Regulation (EC) No. 830/2015

First-aid measures after skin contact	: Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. If symptoms develop obtain medical attention.
First-aid measures after eye contact	: Immediately flush eyes thoroughly with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If symptoms develop obtain medical attention.
First-aid measures after ingestion	: Do NOT induce vomiting. Rinse mouth. Give 100 - 200 ml of water to drink. If symptoms develop obtain medical attention.

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

Symptoms/injuries after skin contact	: Contact during a long period may cause light irritation.
Symptoms/injuries after eye contact	: May cause eye irritation.
Symptoms/injuries upon intravenous administration	: Ingestion may cause irritation of the gastrointestinal tract.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Carbon dioxide. Carbon monoxide. Nitrogen oxides.

5.3. Advice for firefighters

Firefighting instructions	: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Avoid fire-fighting water entering the environment.
Protection during firefighting	: As in any fire, wear self-contained breathing apparatus and full protective gear.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Use chemically protective clothing.
Emergency procedures : Ensure adequate ventilation. Avoid contact with skin and eyes. Avoid inhalation of vapours.

6.2. Environmental precautions

None

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

6.4. Reference to other sections

SECTION 8: Exposure controls/personal protection. SECTION 13: Disposal considerations.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling	: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Avoid contact with skin, eyes and clothing. Avoid inhalation of vapours. Wear recommended personal protective equipment. Take off contaminated clothing and wash before reuse.
Hygiene measures	: Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep only in the original container in a cool well ventilated place. Keep container closed when not in use. Protect material from direct sunlight.

7.3. Specific end use(s)

Filtration enhancer for central heating systems filters.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Potassium hydroxide (1310-58-3)		
United Kingdom	Local name	Potassium hydroxide
United Kingdom	WEL STEL (mg/m ³)	2 mg/m ³

Sentinel X900 Filter Aid

Safety Data Sheet

according to Regulation (EC) No. 830/2015

8.2. Exposure controls

Appropriate engineering controls	: Provide adequate ventilation, including appropriate local extraction, to ensure that occupational exposure limits are not exceeded.
Personal protective equipment	: Avoid all unnecessary exposure.
Hand protection	: Wear protective gloves. Standard EN 374 - Protective gloves against chemicals.
Eye protection	: Chemical goggles or safety glasses. Standard EN 166 - Personal eye-protection.
Skin and body protection	: Use chemically protective clothing.
Respiratory protection	: Not required for normal conditions of use. In case of insufficient ventilation, wear suitable respiratory equipment.
Thermal hazard protection	: Not required for normal conditions of use.
Environmental exposure controls	: Not required
Other information	: Do not eat, drink or smoke during use. Handle in accordance with good industrial hygiene and safety procedures.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Aqueous solution.
Colour	: Clear. orange. brown.
Odour	: characteristic.
Odour threshold	: No data available
pH	: 6.8 @ 25 °C
Relative evaporation rate (butylacetate=1)	: No data available
Relative evaporation rate (ether=1)	: < 1
Melting point	: -11 °C
Freezing point	: No data available
Boiling point	: 100 °C
Flash point	: > 100 °C
Self ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Not applicable Non flammable.
Vapour pressure	: No data available
Relative vapour density at 20 °C	: < 1 Relative density, gas (air=1)
Relative density	: 1.08 @ 25 °C
Solubility	: Miscible with water.
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: Not explosive.
Oxidising properties	: Not oxidising.
Explosive limits	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

None known.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No information available.

10.4. Conditions to avoid

Extremely high or low temperatures.

10.5. Incompatible materials

None known.

Sentinel X900 Filter Aid

Safety Data Sheet

according to Regulation (EC) No. 830/2015

10.6. Hazardous decomposition products

Carbon monoxide. Carbon dioxide. Nitrogen oxides.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

Sentinel X900 Filter Aid	
LD50 oral rat	> 3000 mg/kg (calculated value)
LD50 dermal rabbit	> 14000 mg/kg (calculated value)

Potassium hydroxide (1310-58-3)	
LD50 oral rat	365 mg/kg

Skin corrosion/irritation : Not classified
Based on available data, the classification criteria are not met
pH: 6.4 @ 25 °C

Serious eye damage/irritation : Not classified
Based on available data, the classification criteria are not met
pH: 6.4 @ 25 °C

Respiratory or skin sensitisation : Not classified
Based on available data, the classification criteria are not met

Germ cell mutagenicity : Not classified
Based on available data, the classification criteria are not met

Carcinogenicity : Not classified
Based on available data, the classification criteria are not met

Reproductive toxicity : Not classified
Based on available data, the classification criteria are not met

Specific target organ toxicity (single exposure) : Not classified
Based on available data, the classification criteria are not met

Specific target organ toxicity (repeated exposure) : Not classified
Based on available data, the classification criteria are not met

Aspiration hazard : Not classified
Based on available data, the classification criteria are not met

Potential Adverse human health effects and symptoms : Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

12.1. Toxicity

Sentinel X900 Filter Aid	
EC50 Daphnia	> 7000 mg/l 48 h - Daphnia magna

12.2. Persistence and degradability

Sentinel X900 Filter Aid	
Persistence and degradability	No information available.

12.3. Bioaccumulative potential

Sentinel X900 Filter Aid	
Bioaccumulative potential	Low bioaccumulation potential.

Potassium hydroxide (1310-58-3)	
Log Pow	0.65

12.4. Mobility in soil

Sentinel X900 Filter Aid	
Ecology - soil	No information available.

12.5. Results of PBT and vPvB assessment

Sentinel X900 Filter Aid	
This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII	
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII	

Sentinel X900 Filter Aid

Safety Data Sheet

according to Regulation (EC) No. 830/2015

12.6. Other adverse effects

None :

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Empty containers should be taken to an approved waste handling site for recycling or disposal.

Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

No dangerous good in sense of transport regulations

14.2. UN proper shipping name

Proper Shipping Name (ADR/RID) : Not applicable

Proper Shipping Name (IATA) : Not applicable

Proper Shipping Name (IMDG) : Not applicable

:

14.3. Transport hazard class(es)

Not applicable

14.4. Packing group

Not applicable

14.5. Environmental hazards

Other information : Not classified.

14.6. Special precautions for user

Special transport precautions : No special precautions required.

14.6.1. Overland transport

No additional information available

14.6.2. Transport by sea

No additional information available

14.6.3. Air transport

No additional information available

14.7. 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

15.1.1. EU-Regulations

No REACH Annex XVII restrictions

Contains no REACH candidate substance

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Data sources : 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, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Sentinel X900 Filter Aid

Safety Data Sheet

according to Regulation (EC) No. 830/2015

Abbreviations and acronyms

: ADR (Accord européen relatif au transport international des marchandises Dangereuses par Route). ATE (Acute Toxicity Estimate). CAS (Chemical Abstracts Service) number. CLP (Classification, Labeling and Packaging). DNEL (Derived No effect Limit). EC (European Community). EC50 (Effective Concentration 50%). EN (European Norm). IARC (International Agency for Research on Cancer). IATA (International Air Transport Association). IBC (Intermediate Bulk Container). IMDG (International Maritime Dangerous Goods Code). IMO (International Maritime Organisation). LC50 (Lethal Concentration 50%). LD50 (Lethal Dose 50%). MAC (Maximal Allowed Concentration). OW (Oil-in-Water (chemistry)). OECD (Organisation for Economic Co-operation and Development). PBT (Persistent, bioaccumulative and toxic). PMcc (Pensky-Martens Closed Cup test). PNEC (predicted no effect concentration). REACH (Registration, Evaluation and Authorisation of CHemicals). RID (Règlement concernant le transport international ferroviaire de marchandises). STEL (Short Term Exposure Limit). TWA (Time Weighted Average). UNxxxx (Number assigned by the United Nations Committee of Experts on the Transport of Dangerous Goods). vPvB (very persistent and very bioaccumulative).

Other information

: None.

Full text of R-, H- and EUH-phrases::

Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Skin Corr. 1A	Skin corrosion/irritation, Category 1A
H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
C	Corrosive

NCEC SDS EU (REACH ANNEX II)

The information and recommendations contained herein are based upon data believed to be up-to-date and correct. However, no guarantee or warranty of any kind, express or implied, is made with respect to the information and recommendations contained herein. We accept no responsibility and disclaim all liability for any harmful effects that may be caused by (incorrect) use, handling, purchase, resale, or exposure to our product. Customers and users of our product must comply with all applicable health and safety laws, regulations, and orders. In particular, they are under an obligation to carry out a risk assessment for the particular work places and to take adequate risk management measures in accordance with the national implementation legislation of EU Directives 89/391 and 98/24.