

# **SAFETY DATA SHEET**

Issuing Date 01-June-2017 Revision Date 27 June 2017 Version 2.3

# Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

# 1.1 Product identifier

Product name Sentinel X900 Filter Aid Concentrate

Pure substance/mixture Mixture.

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

**Recommended Use** Filtration enhancer for central heating system filters.

Uses advised against None known.

# 1.3 Details of the supplier of the safety data sheet

Company Information SENTINEL PERFORMANCE SOLUTIONS LTD

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1.4 Emergency telephone

**Emergency telephone** +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

Not classified

# 2.2 Label elements

According to Regulation (EC) No. 1272/2008 (CLP)

# Signal Word

None

# **Hazard Statements**

None

# **Precautionary statements**

None

#### 2.3 Other hazards

May cause skin and eye irritation. Ingestion may cause irritation of the gastrointestinal tract.

This preparation contains no substance considered to be persistent, bioaccumulating nor toxic (PBT) This preparation contains no substance considered to be very persistent nor very bioaccumulating (vPvB)

# Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

# 3.1 Substances

Not applicable

# 3.2 Mixtures

Chemical Name	EC-No	CAS-No	w/w%	Classification (EU Reg. 1272/2008)	REACH Registration Number
Pyridine-2-thiol 1-oxide, sodium salt	223-296-5	3811-73-2	<1	Acute Tox. 4 (H302) Acute Tox. 4 (H312) Acute Tox. 4 (H332) Eye Irrit. 2 (H319) Skin Irrit. 2 (H315) Aquatic. Acute 1 (H400)*	01-2119493385-28- XXXX
Potassium hydroxide	215-181-3	1310-58-3	<1	Acute Tox. 4 (H302) Skin Corr. 1A (H314)*	01-2119487136-33- XXXX

For the full text of H-Statements see Section 16

<sup>\*</sup> Substance with Workplace Exposure Limit. See Section 8.

# Section 4: FIRST AID MEASURES

# 4.1 Description of first aid measures

Eye contact Immediately flush with plenty of water. After initial flushing, remove any contact lenses and

continue flushing for at least 15 minutes. If symptoms develop obtain medical attention.

Skin contact Remove contaminated clothing and shoes. Wash off immediately with soap and plenty of

water. If symptoms develop obtain medical attention.

Ingestion Do NOT induce vomiting. Wash out mouth with water and give 100 - 200 ml of water to

drink. If symptoms develop obtain medical attention.

Inhalation Remove patient from exposure, keep warm and at rest. If symptoms develop obtain

medical attention.

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

Main Symptoms May cause skin and eye irritation. Ingestion may cause irritation of the gastrointestinal

tract.

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

Notes to physician Treat symptomatically.

# Section 5: FIRE-FIGHTING MEASURES

# 5.1 Extinguishing media

#### Suitable Extinguishing Media

Water spray, Foam, Dry powder, Carbon dioxide (CO<sub>2</sub>).

#### Extinguishing media which shall not be used for safety reasons

Do not use water jet.

#### 5.2 Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating and toxic gases and vapors: Carbon monoxide (CO), Carbon dioxide (CO<sub>2</sub>), Nitrogen oxides (NOx).

#### 5.3 Advice for firefighters

As in any fire, wear self-contained breathing apparatus and full protective gear. Cool containers / tanks with water spray.

# Section 6: ACCIDENTAL RELEASE MEASURES

#### 6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Avoid contact with the skin and the eyes. Avoid inhalation of mists or vapor. Use personal protective equipment.

#### 6.2 Environmental precautions

Avoid release to the environment. Local authorities should be advised if significant spillages cannot be contained.

#### 6.3 Methods and materials for containment and cleaning up

Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.

#### 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

Ensure adequate ventilation. Avoid breathing vapors or mists. Avoid contact with skin, eyes and clothing. Remove and wash contaminated clothing before re-use.

Do not eat, drink or smoke during work. Wash thoroughly after handling.

# 7.2 Conditions for safe storage, including any incompatibilities

Keep only in the original container/package in a cool well-ventilated place. Keep away from heat and sources of ignition. Keep away from direct sunlight. Protect from frost.

#### 7.3 Specific end use(s)

Filtration enhancer for central heating system filters.

# Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

# 8.1 Control parameters

Chemical Name	Pyridine-2-thiol 1-oxide, sodium salt
	3811-73-2
Germany	TWA: 1 mg/m <sup>3</sup>
	Ceiling / Peak: 2 mg/m <sup>3</sup>
	Skin
Denmark	TWA: 1 mg/m <sup>3</sup>
	Skin
Austria	Skin
	STEL 4 mg/m <sup>3</sup>
	TWA: 1 mg/m <sup>3</sup>
Switzerland	Skin
	STEL: 2 mg/m <sup>3</sup>
	TWA: 1 mg/m <sup>3</sup>
Chemical Name	Potassium hydroxide
	1310-58-3
The United Kingdom	STEL: 2 mg/m <sup>3</sup>
France	STEL: 2 mg/m <sup>3</sup>
Spain	STEL: 2 mg/m <sup>3</sup>
Portugal	Ceiling: 2 mg/m <sup>3</sup>
Finland	STEL: 2 mg/m <sup>3</sup>
	Ceiling: 2 mg/m <sup>3</sup>
Denmark	Ceiling: 2 mg/m <sup>3</sup>
Austria	TWA: 2 mg/m <sup>3</sup>
Switzerland	TWA: 2 mg/m <sup>3</sup>

Poland	STEL: 1 mg/m³ TWA: 0.5 mg/m³
Norway	Ceiling: 2 mg/m <sup>3</sup>
Ireland	STEL: 2 mg/m <sup>3</sup>

**Derived No Effect Level (DNEL)** No information available

Predicted No Effect Concentration No information available (PNEC)

#### 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

**Eye Protection** Goggles (EN 166)

**Hand Protection** Protective gloves (EN 374) Skin and body protection Long sleeved clothing

Respiratory protection Not normally required. In case of insufficient ventilation wear suitable respiratory

equipment

Hygiene measures Handle in accordance with good industrial hygiene and safety practice.

Environmental Exposure Controls Avoid release to the environment

# Section 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical state Gel

**Appearance** Viscous, Aqueous solution

Odor Characteristic

Clear, Red, Brown, Amber. Color **Odor Threshold** No information available

Property Values Remarks • Methods

рΗ @ 25 (5% v/v) °C 25 (5% v/v)1 6.0

No information available

0 °C Melting/freezing point

**Freezing Point** 

Boiling point/boiling range 104 °C

**Flash Point** > 100 °C

**Evaporation rate** No information available

Flammability (solid, gas) Not applicable

Flammability Limits in Air No information available

upper flammability limit lower flammability limit

Vapor pressure

No information available Vapor density No information available

Relative density @ 25 °C 1.10

Miscible Water solubility

Solubility in other solvents No information available Partition coefficient: No information available

n-octanol/water

No information available **Auto-ignition temperature Decomposition temperature** No information available @ 20 °C

Viscosity, kinematic 17700 mPa·s Viscosity, dynamic 25 Pa S

**Explosive properties** Not explosive

Oxidizing properties Not oxidizing

#### 9.2 Other information

No information available

# Section 10: STABILITY AND REACTIVITY

#### 10.1 Reactivity

No data available.

#### 10.2 Chemical stability

Stable under normal conditions.

#### 10.3 Possibility of hazardous reactions

No information available.

#### 10.4 Conditions to avoid

Heat, flames and sparks.

#### 10.5 Incompatible materials

None known.

#### 10.6 Hazardous decomposition products

Thermal decomposition can lead to release of irritating and toxic gases and vapors: Carbon monoxide (CO), Carbon dioxide (CO<sub>2</sub>), Nitrogen oxides (NOx).

# Section 11: TOXICOLOGICAL INFORMATION

**Inhalation** No known effect based on information supplied.

**Eye contact Skin contact**May cause eye irritation.

May cause skin irritation.

**Ingestion** Ingestion may cause irritation of the gastrointestinal tract.

# 11.1 Information on toxicological effects

# **Acute toxicity**

LD50 Oral: > 2000 mg/kg (rat) Calculated

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Potassium hydroxide	365mg/kg (Rat)	-	-

**Skin corrosion/irritation** Based on available data, classification criteria are not met.

Serious eye damage/irritation Based on available data, classification criteria are not met.

**Respiratory or skin sensitisation** Based on available data, classification criteria are not met.

**Mutagenicity** Based on available data, classification criteria are not met.

**Carcinogenicity** Based on available data, classification criteria are not met.

**Reproductive toxicity** Based on available data, classification criteria are not met.

STOT - Single exposure Based on available data, classification criteria are not met.

**STOT - Repeated exposure**Based on available data, classification criteria are not met.

**Aspiration hazard** Based on available data, classification criteria are not met.

Other information No information available.

# Section 12: ECOLOGICAL INFORMATION

#### 12.1 Toxicity

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates
Pyridine-2-thiol 1-oxide, sodium salt	-	-	EC50: 0.022 mg/L 48 h (water flea)

WGK Classification 1

# 12.2 Persistence and degradability

Some of the components are biodegradable.

#### 12.3 Bioaccumulative potential

Chemical Name	Bioconcentration factor (BCF)	log Pow
Potassium hydroxide	-	0.65
•		0.83

#### 12.4 Mobility in soil

No information available.

# 12.5 Results of PBT and vPvB assessment

This preparation contains no substance considered to be persistent, bioaccumulating nor toxic (PBT). This preparation contains no substance considered to be very persistent nor very bioaccumulating (vPvB).

# 12.6 Other adverse effects

No information available.

# Section 13: DISPOSAL CONSIDERATIONS

# 13.1 Waste treatment methods

Waste from residues / unused products

Disposal should be in accordance with local, state or national legislation.

Contaminated packaging

Clean container with water. Empty containers should be taken to an approved waste

handling site for recycling or disposal.

# Section 14: TRANSPORT INFORMATION

Not classified as hazardous for transport.

		ADR/RID/ADN	ICAO/IATA	IMDG / IMO
14.1	UN Number	-	-	-
14.2	UN proper shipping name	-	-	-
14.3	Transport hazard class(es)	-	-	-
14.4	Packing group	-	-	-
14.5	<b>Environmental Hazards</b>	Not Classified	Not Classified	Not Classified
14.6	Special precautions for user	No special precautions are needed in handling this material		
to Ar	Transport in bulk according nex II of MARPOL 73/78 and BC Code		-	

# Section 15: REGULATORY INFORMATION

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

This safety data sheet complies with the requirements of Regulations (EC) No. 1907/2006 and No. 830/2015

WGK Classification 1

#### 15.2 Chemical Safety Assessment

Chemical Safety Assessment has not been carried out.

# Section 16: OTHER INFORMATION

#### Full text of H-Statements referred to under sections 2 and 3

H302 - Harmful if swallowed

H312 - Harmful in contact with skin

H314 - Causes severe skin burns and eye damage

H315 - Causes skin irritation

H319 - Causes serious eye irritation

H400 - Very toxic to aquatic life

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### **Disclaimer**

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