

SAFETY DATA SHEET**SENTINEL X200**

1 IDENTIFICATION OF PREPARATION AND OF COMPANY**1.1 Identification of the substance or preparation**

Product : SENTINEL X200

1.2 Use of substance/preparation

Boiler descaler for central heating systems

1.3 Company/undertaking identification

Sentinel Performance Solutions Ltd.
The Heath Business & Technical Park
Runcorn
Cheshire WA7 4QX
United Kingdom
Tel: +44 (0) 1928 588 330
Fax: +44 (0) 1928 588 368

1.4 Emergency telephone

+44 (0)1928 588339

Official advisory body :

National Poisons Information Centre
Medical Toxicology Unit
Guy's and St. Thomas' NHS Trust
Avonley Road, London, SE14 5ER
Tel.: 0207 358 9167, Fax : 0207 771 5309

2 COMPOSITION / INFORMATION ON INGREDIENTS**Chemical description**

Neutral solution of synthetic polymers, phosphonate and surfactant

| Hazardous component(s) | EINECS/ELINCS # | CAS # | Conc. |
|-------------------------------|------------------------|--------------|--------------|
| None. | | | |

3 HAZARDS IDENTIFICATION**Important hazards**

- Health/physical hazard Not considered hazardous to health.
- Environmental hazards The product is not classified as dangerous for the environment.

4 FIRST AID MEASURES

- Skin contact** Wash with water.
- Eye contact** Flush immediately with plenty of running water.
- Inhalation** Remove to fresh air.
- Ingestion** Rinse mouth with water.

SAFETY DATA SHEET**SENTINEL X200**

5 FIRE-FIGHTING MEASURES**Extinguishing Media**

- Suitable Carbon dioxide, dry chemicals, foam, water spray (fog).

Special protective equipment for fire fighters

Self contained breathing apparatus. (CEN : EN 137)
Protective clothing (CEN : EN 469)
Protective gloves (CEN : EN 659)
Helmet (CEN : EN 443)

Special exposure hazards

Phosphines, oxides of carbon, nitrogen, and phosphorus evolved in fire.

6 ACCIDENTAL RELEASE MEASURES**Personal precautions**

Protective clothing
Please refer also to section no. 8 'Exposure controls' for further information.

Environmental precautions

Handle in accordance with good industrial hygiene and safety procedures.
Accidental release of large quantities into the aquatic environment may harm aquatic organisms.

Methods for Cleaning Up

- on soil Absorb onto inert material and dispose of according to Controlled Waste Regulations.

7 HANDLING AND STORAGE**7.1 Handling**

Do not breathe vapours.
Avoid contact with skin and eyes.

7.2 Storage

Store between 12 - 55 °C
Material is stable at least 6 months.
Keep container tightly closed.
Store in cool, well ventilated area.

Maximum storage stability (days)

275

8 EXPOSURE CONTROLS/PERSONAL PROTECTION**Exposure controls**

- Recommended engineering controls Ensure good ventilation.
- Respiratory protection Not required.
- Hand protection Protective gloves (Plastic, impervious) (Protection against unintentional short-term contact)
CEN : EN 420
- Eye protection Safety goggles.
CEN : EN 166
- Skin protection Protective clothing if splashing or repeated contact with product is likely.
CEN : EN 340
- Environmental exposure controls Prevent from entering in public sewers or the immediate environment.

9 PHYSICAL AND CHEMICAL PROPERTIES

SAFETY DATA SHEET**SENTINEL X200**

9.1 General information

| | |
|------------|------------|
| Appearance | Liquid |
| Colour | Colourless |
| Odour | Mild |

9.2 Important health, safety and environmental info

| | |
|--------------------------------------|--------------------|
| pH (concentrated product) | 10,3 |
| Boiling point/range (°C) | 100 |
| Flash point (Pensky/Martens) (°C) | None. |
| Density at 20°C (kg/m ³) | 1023 |
| Solubility in water (% weight) | Completely soluble |
| Viscosity at 20°C (mPas) | 10 |
| Relative vapour density (air=1) | < 1 |
| Evaporation rate (ether=1) | < 1 |

9.3 Other information

| | |
|---------------------|---|
| Melting point, (°C) | 0 |
| Pour point, (°C) | 3 |

10 STABILITY AND REACTIVITY

| | |
|--|---|
| 10.1 Conditions to avoid | Protect from freezing. |
| 10.2 Materials to avoid | None known. |
| 10.3 Hazardous decomposition products | Phosphines, oxides of carbon, nitrogen, and phosphorus evolved in fire. |

11 TOXICOLOGICAL INFORMATION**Mammalian Test Data**

| | |
|-------------------------------|---------------------------|
| - Oral LD50, rat (mg/kg) | (Calculated data) > 10000 |
| - Dermal LD50, rabbit (mg/kg) | (Calculated data) > 10000 |

Exposure hazard

| | |
|----------------|--|
| - Inhalation | Prolonged or repeated exposure may cause transient irritation. |
| - Skin contact | Prolonged or repeated contact may cause transient irritation. |
| - Eye contact | Prolonged or repeated contact may cause transient irritation. |
| - Ingestion | May cause slight gastrointestinal irritation. |

12 ECOLOGICAL INFORMATION**Ecotoxicity**

| | |
|------------------------|---|
| - Rainbow Trout (mg/l) | LC50 : > 10000 (Calculated data) 96 hour static acute bioassay |
|------------------------|---|

SAFETY DATA SHEET

SENTINEL X200

Persistence and degradability

- COD (mgO₂/g) 21

Other adverse effects

- Nutrients P = 0.83 mg/g

Summary

The product is not classified as dangerous for the environment.

13 DISPOSAL CONSIDERATIONS

Disposal of product

According to Controlled Waste Regulations.

EWC (European Waste Code) recommendation : 16 03 06

16 Wastes not otherwise specified in the list.

16 03 Off-specification batches and unused products.

16 03 06 Organic wastes

Depending on the origin and state of the waste, other EWC numbers may be applicable too.

Disposal of packaging

According to Controlled Waste Regulations.

EWC (European Waste Code) recommendation : 15 01 02

15 Waste packaging; absorbents, wiping cloths, filter materials and protective clothing not otherwise specified.

15 01 Packaging (including separately collected municipal packaging waste).

15 01 02 Plastic packaging.

Depending on the origin and state of the waste, other EWC numbers may be applicable too.

14 TRANSPORT INFORMATION

Substance id.no. (SIN) (UN No.) Not applicable.

Correct shipping name Not applicable.

Land transport

- RID/ADR classification Not classified under this legislation.

Maritime transport

- IMO-IMDG class Not classified under this legislation

Air transport

- ICAO/IATA classification Not classified under this legislation

SAFETY DATA SHEET

SENTINEL X200

Version: 2.3

Effective Date: 20/03/2006

Previous Date: 23/01/2006

15 REGULATORY INFORMATION

EEC labelling information

- | | |
|-----------------|---|
| - Symbol(s) | None. |
| - R Phrase(s) | No Risk phrases assigned. |
| - S Phrase(s) | S 2 :Keep out of the reach of children. S 24/25 :Avoid contact with skin and eyes. S 26 :In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S 28 :After contact with skin, wash immediately with plenty of water. |
| - EINECS number | All ingredients of this product are listed in EINECS or ELINCS, unless specifically exempted under the EEC Directive 67/548/EEC. |

16 OTHER INFORMATION

- | | |
|-----------------------|---|
| Nature of revision | Correction in Section: 1 |
| Based on EC Directive | 1999/45/EC 2001/58/EC 2001/118/EC |