

Material



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1. PRODUCT AND COMPANY INFORMATION

Identification of the substance/preparation X400 Use of the substance/preparation Sludge remover for central heating systems **Company Identification** Sentinel Performance Solutions Ltd. **Douglas Products and Packaging** Manufactured by Address and Telephone No. 1550 East Old 210 Highway Liberty Missiouri, 64068 USA (816)-781-4250 (8am - 5pm) Telephone for further information: Emergency Phone No. Chemtrec (800) 424-9300 (24/7) Fax: (816)-781-1043

2. HAZARDS IDENTIFICATION

Emergency Overview Appearance and odour: Appearance Odour Vellow to brown liquid Mild odour

This material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Statements of Hazard None

Potential Health Effects

Primary routes of entry by skin or eye contact.

Eye contact - prolonged or repeated exposure may cause transient irritation. Skin contact - prolonged or repeated exposure may cause transient irritation. Inhalation - prolonged or repeated exposure may cause transient irritation. Ingestion of large amounts may cause slight gastrointestinal irritation.



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3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical description

Neutral solution of synthetic organic polymer.

Hazardous component(s)

| Ingredient | CAS Number | EC Number | % | Symbol | Risk Phrases |
|-------------------|------------|-----------|---|--------|--------------|
| No hazardous | | | | | |
| ingredients above | | | | | |
| 1% | | | | | |

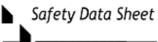
| 4. FIRST-AID MEASURES | |
|-----------------------|---|
| Inhalation | Remove patient to fresh air, allow to rest and keep warm. |
| Skin contact | Seek medical attention if symptoms develop. Wash with plenty of water. Remove any contaminated clothing and launder before reuse. Seek medical attention i symptoms develop. |
| Eye contact | Flush immediately with plenty of water for at least 15 minutes, keeping eyelids open. Seek medical attention if symptoms develop. |
| Ingestion | DO NOT induce vomiting! Rinse mouth out with water, but do not give anything to drink. Seek medical attention if symptoms develop. |
| Personal precautions | Ensure that those giving first aid treatment do not get contaminated by product spills, etc. Wear suitable protective clothing, gloves and eye protection. See also Section 8. |

5. FIRE-FIGHTING MEASURES

| - Suitable - Not to be used | Water, foam, carbon dioxide, dry powder. None. |
|--|--|
| Special exposure hazards Special protective equipment for fire fighters | Oxides of carbon, nitrogen and sulphur evolved in fire. Protective clothing and self-contained breathing apparatus. |
| Flash point | Not flammable. |



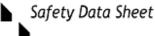
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| 6. ACCIDENTAL RELEASE MEASURES | | | | | | |
| Personal precautions Environmental precautions | See Section 8 for Prevent from ent | Wear suitable protective clothing, gloves and eye protection. See Section 8 for details. Keep unnecessary personnel away. Prevent from entering sewers or the immediate environment. In case of large spill, inform local authorities. | | | | |
| Methods for cleaning up - on soil - on water | Absorb onto inert | material such as earth, soil or specialist ct and place into sealed container for safe | | | | |
| | | | | | | |
| 7. HANDLING AND STORAGE Handling | Avoid contact wit vapours or spray. | h skin and eyes. Do not ingest or inhale | | | | |
| Storage | Store in cool, wel | Keep in original containers. Keep container tightly closed. Store in cool, well ventilated area. Protect from freezing and from high temperatures. | | | | |
| 8. EXPOSURE CONTROLS/PERSONAL PRO | OTECTION | | | | | |
| Recommended engineering controls | Ensure good vent | ilation. Arrange for eye wash possibility. | | | | |
| Control parameters: | None set. | | | | | |
| Monitoring procedures | Not required. | | | | | |
| Personal protection Always check applicability with your suppl | ier of protective equip | oment. | | | | |
| - Respiratory protection | | tient ventilation, wear full face or half face | | | | |
| - Skin protection | | filter suitable for liquid particulates. or overalls if splashing or repeated contact kely. | | | | |
| Eye protectionHand protection | Chemical goggles Plastic, imperviou unintentional sho performance is go | or full face visor. us gloves for protection against rt-term contact. However, since glove overned by many variables, it is strongly specialist advice on the selection and use of | | | | |



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9. PHYSICAL AND CHEMICAL PROPERTIES

| Odour | | | | | |
|--------------------------------------|--|--|--|--|--|
| Ououi | | | | | |
| pH (concentrated product) | | | | | |
| Melting point (°C) | | | | | |
| Boiling point/range (°C) | | | | | |
| Flash point (Pensky Martens) (°C) | | | | | |
| Explosive properties | | | | | |
| Oxidising properties | | | | | |
| Density at 20°C (kg/m ³) | | | | | |
| Solubility in water (% by weight) | | | | | |
| Viscosity at 20°C (mPas) | | | | | |
| Relative vapour density (air=1) | | | | | |
| Evaporation rate (ether=1) | | | | | |

Yellow to brown liquid Mild 6.6 Approx 0 [32°F] Approx 100 [212°F] Not flammable None None 1033 Completely miscible 10 < 1 < 1

Note: These are typical values and do not constitute a specification.

10. STABILITY AND REACTIVITY

Stability Conditions to avoid Materials to avoid Hazardous decomposition products Stable under normal conditions of use. Protect from freezing. None known. Oxides of carbon, nitrogen and sulphur evolved in fire.

11. TOXICOLOGICAL INFORMATION

| Test data: Calculated from ingredient data: | No data available on product. |
|--|--|
| Oral LD₅₀ rat (mg/kg) Dermal LD₅₀, rabbit (mg/kg) | > 30,000 > 14,000 |
| Exposure hazard: | |
| - Inhalation | Prolonged or repeated exposure may cause transient irritation. |
| - Skin contact | Prolonged or repeated exposure may cause transient irritation. |
| - Eye contact | Prolonged or repeated exposure may cause transient irritation. |
| - Ingestion | Likely symptoms are slight gastrointestinal irritation. |



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Other data

None available.

12. ECOLOGICAL INFORMATION

| Aquatic toxicity: Calculated data based on ingredients | No data available on product. |
|---|--|
| - Daphnia Magna (mg/I) EC ₅₀ 48 Hr: | >7,000 |
| Environmental effects: | Not classified as hazardous to the environment under the EU classification system. |

13. DISPOSAL CONSIDERATIONS

Dispose of in accordance with applicable regional, national and local laws and regulations. Local regulations may be more stringent than regional or national requirements.

14. TRANSPORTATION INFORMATION

Not classified as dangerous for transport.

15. REGULATORY INFORMATION

The label shows a CAUTION. Keep Away From Children. Avoid contact with skin and eyes. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. After contact with skin, wash immediately with plenty of water.

Names of the ingredients given on the label: None

R phrases: None.

S phrases: S2, Keep out of the reach of children; S24/25, Avoid contact with skin and eyes; S26, In case of contact with eyes, rinse immediately with plenty of water and seek medical advice; S28, After contact with skin, wash immediately with plenty of water.

| Inventory Status | | | | |
|---------------------------|--|--|--|--|
| TSCA | All ingredients of this product are listed unless specifical exempted. | | | |
| California Proposition 65 | Does not contain any chemicals known to the State of California to cause cancer, birth defects or other reproductive harm. | | | |
| EU | All ingredients of this product are listed in EINECS or ELINCS, unless specifically exempted under EU Directive 67/548/EEC (as amended). | | | |



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Right to know classification:

None are listed in CA, PA, MN, MA, MI, FL and NJ.

Note: The regulatory information given above only indicates the principal regulations specifically applicable to the product described in the safety data sheet. The user's attention is drawn to the possible existence of additional provisions, which complete these regulations. Refer to all applicable national, international and local regulations or provisions.

16. OTHER INFORMATION

| Hazard | Hazardous Material Informatio | | | National Fire Protection Association (NFPA) | | | |
|---|---|-----|---|--|--|---|--|
| Health | | | 0 | 0 | Healt | Health | |
| Fire | | 1 | 1 | Fire | Fire | | |
| Reactiv | ity | | 0 | 0 | Instability | | |
| Persona | I Protection | | G | | NA | | |
| Health Fire Reactivity/Instability | 4 Deadly 4 < 73 °C 4 - May detonate | 3 < | xtreme Dange 100 °C xplosive | 2 | Dangerous < 200 °C Unstable | 1 Slight hazard 1 >200 °C 1 Normally stable | 0 No hazard 0 Will not burn 0 Stable |
| EU labelling informat | ion | | | | | | |
| - Symbol(s) | | | None requ | uired | | | |
| - R-Phrase(s) | | | None assi | gned | | | |
| - S-Phrase(s) | | | 2 24/25 26 28 | | Keep out of the reach of children Avoid contact with skin and eyes n case of contact with eyes, rinse immediately with plenty of water and seek medical advice After contact with skin, wash immediately with plenty of water | | |
| Version number Date prepared Supersedes Version Nature of revision | | | 1 August 20 Not applic First issue | cable | SHA standa | rd. | |
| R-phrases used in Section 3 | | | None | | | | |
| Based on ANSI Z4000.1-2004 and EU Regulation 1907/2006 | | | | | | | |

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