



I. Product and Company Identification

1.1 Identification of the substance or preparation:

OCS DIOX ACTIVATOR 'A'

1.2 Company Identification: Odour Control Systems Limited
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Hawarden,
Deeside.
CH5 3PP.
Tel: 01244 536700 Fax: 01244 535184

II. General Description

Activator 'A'

2.1 Chemical description: Chlorine and Acid Donor Powders with soluble and inert carriers

2.2 Form @ 25 C: Crystalline powder

2.3 Odour: Strong chlorine type odour

2.4 Use: For activation of stabilised solutions of Chlorine Dioxide

III. Physical and Safety Related Data

3.1 Boiling Point: Decomposes below boiling point

3.2 Specific gravity @ 25 C: N / A

3.3 Vapour pressure @ 20 C: Nil

3.4 Solubility in water: Moderate

3.5 Decomposition temperature: 250 - 420 F

3.6 Hazardous reactions: Do not allow to come into contact with water except under controlled conditions. **Never add directly to Undiluted Stabilised Chlorine Dioxide solutions of greater than 2000 ppm strength.**

MATERIAL SAFETY DATA SHEET

IV. Hazard Classification Information

- | | | |
|-----|---------------|----------------|
| 4.1 | Primary Risk: | Oxidising. |
| 4.2 | 5.1 No: | 2208. |
| 4.3 | APR Class: | 5.1 oxidising. |
| 4.4 | C.A.S. No: | 7778-54-3. |
| 4.5 | Hazchem Code: | 2R |

V. Emergency Measures

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|-----|-------------------------------------|---|
| 5.1 | Spillage's: | Small spillage's washed with large volumes of water. Large volumes to be neutralised with carbonate (soda ash) before hosing. |
| 5.2 | Extinguishing media: | Carbonates (soda ash). |
| 5.3 | Fire fighting protection equipment: | Respirators and gloves. |
| 5.4 | First Aid: | |
| | Eye and skin contact: | Rinse well with water and avoid rubbing into the eye. Irritation may be relieved by application of sodium bicarbonate. Seek medical help. |
| | Ingestion: | Give 5% sodium bicarbonate solution followed by a demulcent such as milk |

VI. Use and Application

- 6.1 Activator 'A' is used for controlled and rapid semi and full activation of stabilised solutions of Chlorine Dioxide products such as DIOX 2000, DIOX 5000 etc.
- Can be safely added directly in controlled manner to DIOX 2000 concentrate but avoid inhalation of vapours. Carry out in closed top container or in well ventilated area.
- 6.2 NEVER add directly to solutions of stabilised Chlorine Dioxide of greater than 2000 ppm strength. To do so will release toxic gases.
- 6.3 Addition rate 40 - 80 gms of Activator 'A' powder per 25 litres of DIOX 2000 concentrate, depending on application. Please consult the Company for advice

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VII. Accidental Release Measures

- 7.1 Personal Protection: Wear goggles, plastic gloves and boots.
Eyewash facilities should be available.
- 7.2 Methods of cleaning up: Dispose under local regulations.

VIII. Handling and Storage

- 8.1 Precautions during handling:
- Technical Measures: Ventilation of the place, local exhaust of dust or vapours (in case of product decomposition).
- Precautions: Avoid contact with eyes and skin and breathing of vapours .
Wear personal protective equipment, maintain eye washer shower facilities and source of running water in the vicinity.
- Safe Handling Advice: Handle product with care and avoid contamination.
- 8.2 Precautions During Storage:
- Storage Conditions: Store in cool, clean well ventilated dry area. Do not store on wooden surfaces or flammable pallets. Keep containers closed Keep away from incompatible (especially acids) and combustible materials, from direct sunlight and heating sources. Do not store at temperatures above 520c.provide water facilities.
- 8.3 Packaging Materials: Do not use common steel, aluminium, copper and its alloys, rubber. Use stainless steel, glass, ceramics, polythene, PVC.

IX. Exposure Controls/Personal Protection

- 9.1 Special Protective Measures: Wear suitable respirator
- Hand: Wear plastic gloves.
- Eye: Wear goggles
- Skin: Work suit, preferably made of PVC, neoprene, nitrile rubber.
Avoid leather, cotton or natural rubber due to fire risk.
- Respiratory: Wear dust mask/ respirator

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X. Physical and Chemical Properties

10.1 Physical State	White powder / granules mix
10.2 Odour:	Chlorine
10.3. Temperature Characteristics:	N/A
10.4. pH:	N/A
10.5. Solubility:	
In Water:	Soluble
In Solvents:	Insoluble
10.6. Vapour Pressure	N/A
10.7. Density:	N/A
10.8. Flammability:	Not Combustible

XI. Stability and Reactivity

11.1 STABILITY	Minimum 6 months in unopened containers.
11.2. conditions/materials to avoid:	Avoid exposure to direct sunlight and heat. Decomposed by heating, acids and organic and combustible matter. Avoid contact with reducing agents and nitrogen containing compounds
11.3. Decomposition Temperature	May decompose to produce chlorine gas and Dangerous Products which can cause overpressure and burst Released. in confined spaces. Toxic chlorine compounds may be released.

XII. Toxicological Information

12.1 Acute Toxicity:	Dust causes severe irritation to eyes, skin respiratory and digestive tracts. Causes chemical burns when moist. Causes vomiting and stomach pains when ingested. Causes temporarily loss of vision and possible permanent eye damage. Exposure to high levels of decomposition fumes may cause respiratory difficulties and pulmonary oedema.
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XIII. Biological Information

13.1 Mobility	Will disperse through aqueous systems
13.2. Persistence and Degradability	Will degrade
13.3. Bioaccumulative Potential	No evidence of Bioaccumulation, moderately toxic to living resources LC50 ----- 1 - 10mg 1l

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XIV. Disposal Considerations

- 14.1 Disposal of product: Disposal of, through approved waste disposals operative.
- 14.2 Disposal of Packaging: Rinse empty containers thoroughly before disposal.

XV. Transport Information

15.1 UN Nos: 2208 and 3260 Apply

15.2. UK Road:

Hazchem Code	2R
Classification	Oxidising and Corrosive.
Packing Group	III
Tremcord Nos.	Tec ® 861

XVI. Regulatory Information

16.1 The chemicals (hazard information and packaging for supply) regulations 1994:

- | | |
|---------------------------|-------------------------------------|
| • EINECS NOS. | 231 - 665 - and 231 - 908 - 7 apply |
| • Index No: | Not listed |
| • Safety Phrases | S2, S26 & 36, S37, S39 - S45. |
| • Classification Symbols: | Oxidiser and Corrosive |

XVII. Other Information

17.1 Recommended uses: See Section 5

This information is given in good faith and is based on information and tests believed to be reliable. The suitability of this product for any particular use is not suggested or implied. This document is not a specification and properties shown are not guaranteed.

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Each recipient should carefully review this information, data and recommendations in this specific context of its intended use. This product should only be used according to the specific guidelines for use laid out in Odour Control Systems Limited publications. Use of these products is deemed to be acceptance of the above.

Always READ material safety data sheet before use.

preserving the environment

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