



MATERIAL SAFETY DATA SHEET

Ref: MSDS-019

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Issue: 2

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HYDRATED TIN OXIDE DISPERSION

1. PRODUCT AND COMPANY INFORMATION

- 1.1. Substance identification: Hydrated tin oxide dispersion
- 1.2. Company identification: Keeling & Walker Limited,
Whieldon Road,
Stoke-on-Trent
ST4 4JA, ENGLAND.
- 1.3. Emergency contact number: +44 (0) 1782 744 136

2. COMPOSITION / INFORMATION ON INGREDIENTS

- 2.1. Hydrated tin oxide dispersed in a dilute aqueous solution of potassium hydroxide.
- 2.2. Synonyms: Hydrated tin oxide colloidal dispersion, tin oxide dispersion, alpha stannic acid dispersion.
- 2.3.
- | | CAS Number | EINECS No. |
|----------------------|------------|------------|
| Hydrated tin oxide: | 18282-10-5 | 2421590 |
| Potassium hydroxide: | 1310-58-3 | 2151813 |

3. HAZARDS IDENTIFICATION

- 3.1. Potassium hydroxide solution is classified as corrosive in the Approved Supply List of the Chemicals (Hazard Information and Packaging) Regulations.
- 3.2. A preparation with a potassium hydroxide content in the range 2 to 5% is classified as corrosive.
- 3.3. Hazard symbol: C; Corrosive

4. FIRST AID MEASURES

- 4.1. Inhalation: Remove from exposure to fresh air
- 4.2. Ingestion: Drink plenty of water, seek medical attention
- 4.3. Eye contact: Flush eyes with water, seek medical attention
- 4.4. Skin contact: Remove contaminated clothing and wash affected area with soap and water.

HYDRATED TIN OXIDE DISPERSION**5. FIRE-FIGHTING MEASURES**

- 5.1. Suitable extinguishing media: Any
- 5.2. Unsuitable extinguishing media: None
- 5.3. Exposure hazards: Can cause burns on prolonged exposure
- 5.4. Protective equipment for fire-fighters: Use self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

- 6.1. Personal precautions: Avoid contact with skin, eyes and clothing.
Wear suitable personal protective equipment.
- 6.2. Environmental precautions: Dispose of material to approved waste disposal site via authorised waste disposal contractor.
- 6.3. Method of clean-up: Absorb on sand or vermiculite, place in closed containers for disposal.

7. HANDLING AND STORAGE

- 7.1. Precautions during handling: Wear gloves and goggles and suitable impervious clothing.
- 7.2. Storage: Store in a well-ventilated, dry area.
- 7.3. Suitable packaging: Sealed polyethylene or glass containers.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

- 8.1. Inhalation: Occupational Exposure Limits:
Tin oxide (H₂SnO₃): 2mg m⁻³ (as Sn) 8 hour TWA
4mg m⁻³ (as Sn) 15 mins STEL
Potassium hydroxide: 2mg m⁻³ 8 hour TWA
2mg m⁻³ 15 mins STEL
- 8.2. Protective measures: Wear gloves, goggles or safety glasses and impervious clothing or overalls.

9. PHYSICAL AND CHEMICAL PROPERTIES

- 9.1. Appearance: Clear or translucent aqueous liquid
- 9.2. Odour: None
- 9.3. Solubility in water: Infinitely dilutable, but will precipitate hydrated tin oxide at high dilutions
- 9.4. pH: Approximately 11-13
- 9.5. Flammability: Nonflammable
- 9.6. Melting point: Not applicable
- 9.7. Boiling point: 97°C
- 9.8. Vapour pressure: No information

HYDRATED TIN OXIDE DISPERSION**10. STABILITY AND REACTIVITY**

- 10.1. Conditions to avoid: None known
- 10.2. Materials to avoid: Oxidising agents, acids, copper, copper alloys and aluminium
- 10.3. Hazardous decomposition products: None known

11. TOXICOLOGICAL INFORMATION

- 11.1. No data

12. ECOLOGICAL INFORMATION

- 12.1. Environmental effect: Dispersible in water, to produce hydrated tin oxide, which is stable and inert under normal environmental conditions (consider effect of pH)

13. DISPOSAL CONSIDERATIONS

- 13.1. Disposal of product: Approved waste disposal site (Refer to Federal, State and Local regulations)
- 13.2. Disposal of packaging: Landfill or incineration

14. TRANSPORT INFORMATION

- 14.1. UN Number 3266
- 14.2. Class 8 . PG III
- 14.3. Proper shipping name: CORROSIVE LIQUID, BASIC, INORGANIC, NOS (hydrated tin oxide and potassium hydroxide solution)

15. REGULATORY INFORMATION

- 15.1. Risk Phrases: R34 - causes burns
- 15.2. Safety Phrases: S: 26, 27, 36/37/39
- 15.3. Classification Symbol: C; corrosive

16. OTHER INFORMATION

- 16.1. HMSO Publication: EH40 Occupational Exposure Limits