



MATERIAL SAFETY DATA SHEET

Ref: MSDS-017
Date: 9/2/98
Issue: 1
Page: 1 of 3

AMMONIA DISPERSED TIN OXIDE

1. PRODUCT AND COMPANY INFORMATION

- 1.1. Substance identification: Ammonia dispersed tin oxide
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 ammonia.
2.2. Synonyms: alpha stannic acid, tin hydroxide oxide
2.3.
- | | CAS Number | EINECS No. |
|---------------------|-------------|------------|
| Hydrated tin oxide: | 18282-10-5 | 2421590 |
| Ammonia solution: | 001336-21-6 | 2156476 |

3. HAZARDS IDENTIFICATION

- 3.1. An ammonia solution with a concentration of less than 5% is not considered to be hazardous.

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.

5. FIRE-FIGHTING MEASURES

- 5.1. Suitable extinguishing media: Any
5.2. Unsuitable extinguishing media: None
5.3. Exposure hazards: May emit toxic fumes under fire conditions
5.4. Protective equipment for fire-fighters: Use self-contained breathing apparatus

AMMONIA DISPERSED TIN OXIDE**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: Use local exhaust ventilation or respiratory protection.
Wear gloves and goggles
- 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 (H_2SnO_3): 2mg m⁻³ (as Sn) 8 hour TWA
4mg m⁻³ (as Sn) 15 Minute STEL
- Ammonia (NH_3): 25ppm (17mg m⁻³) 8 hour TWA
35 ppm (24mg m⁻³) 15 minute STEL
- 8.2. Protective measures: Use local exhaust ventilation or wear respiratory protection to maintain exposure below the limits given above.
Wear gloves, goggles and overalls

9. PHYSICAL AND CHEMICAL PROPERTIES

- 9.1. Appearance: Clear aqueous liquid
- 9.2. Odour: Ammoniacal odour
- 9.3. Solubility in water: Infinitely dilutable, but will precipitate alpha stannic acid at high dilutions
- 9.4. pH: Approximately 10-12
- 9.5. Flammability: Non-flammable
- 9.6. Melting point: Not applicable
- 9.7. Boiling point: No information
- 9.8. Vapour pressure: No information

AMMONIA DISPERSED TIN OXIDE**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. Thermal decomposition products: Will produce ammonia gas when heated.

11. TOXICOLOGICAL INFORMATION

- 11.1. Inhalation: May cause irritation
- 11.3. Ingestion: LD50 of ammonia solution is 350 mg/kg bodyweight (oral rat)
- 11.4. Skin contact: May cause irritation
- 11.5. Eye contact: May cause irritation

12. ECOLOGICAL INFORMATION

- 12.1. Environmental effect: Dispersible in water, to produce alpha-stannic acid, 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. Special precautions: None

15. REGULATORY INFORMATION

- 15.1. Risk Phrases: None assigned
- 15.2. Safety Phrases: None assigned
- 15.3. Classification Symbol: None assigned

16. OTHER INFORMATION

- 16.1. HMSO Publication: EH40 Occupational Exposure Limits