



MATERIAL SAFETY DATA SHEET

Ref: MSDS-028

Date: 14/06/2005

Issue: 3

Page: 1 of 4

STANOSTAT DISPERSION

1. PRODUCT AND COMPANY INFORMATION

- 1.1. Substance identification: STANOSTAT DISPERSION
- 1.2. Company identification: Keeling & Walker Limited,
Whieldon Road,
Stoke-on-Trent,
ST4 4JA, U.K.
- 1.3. Emergency contact number: +44 (0) 1782 744 136

2. COMPOSITION / INFORMATION ON INGREDIENTS

- 2.1. The product comprises an aqueous dispersion of a mixed metal oxide of tin and antimony, solids content of up to 60% w/w
- The composition of the mixed metal oxide is:
Tin (IV) oxide: 80% minimum, Antimony oxide: 20% maximum
- 2.2. Synonyms: Antimony tin oxide (ATO), conductive tin oxide, conductive tin compound, tin antimony grey cassiterite (dispersion)
- 2.3. Chemical Abstract Number: CAS 68187-54-2
European Inventory Number: EINECS 2691059

3. HAZARDS IDENTIFICATION

- 3.1. Antimony oxide is classified in CHIP3 as a Class 3 Carcinogen
- 3.2. Hazard symbol: Xn: HARMFUL (St. Andrews Cross on orange background)

4. FIRST AID MEASURES

- 4.1. Inhalation: Not applicable (But refer to Sections 11 and 16 of this Material Safety Data Sheet)
- 4.2. Ingestion: Drink plenty of water
- 4.3. Eye contact: Flush eyes with water
- 4.4. Skin contact: Remove contaminated clothing and wash affected area with soap and water

STANOSTAT DISPERSION**5. FIRE-FIGHTING MEASURES**

- 5.1. Suitable extinguishing media: Any
- 5.2. Unsuitable extinguishing media: None
- 5.3. Exposure hazards: None known
- 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
- 6.2. Environmental precautions: In accordance with Federal, State and Local regulations.
- 6.3. Neutralising chemicals: Not required
- 6.4. Method of clean-up: Soak up with suitable absorbent. Place in sealed containers for disposal

7. HANDLING AND STORAGE

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

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

- 8.1. Protective measures: Wear gloves, goggles and overalls

9. PHYSICAL AND CHEMICAL PROPERTIES

- 9.1. Appearance: Blue-grey liquid
- 9.2. Odour: No odour
- 9.3. Solubility in water: Infinitely dilutable
- 9.4. pH: Approximately 4 to 7
- 9.5. Flammability: Non-flammable
- 9.6. Melting point: Not applicable
- 9.7. Boiling point: No information
- 9.8. Vapour pressure: No information

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10. STABILITY AND REACTIVITY

- 10.1. Conditions to avoid: None known
- 10.2. Materials to avoid: Substances which may lead to the formation of volatile hydrides or halides of organic tin compounds
- 10.3. Hazardous decomposition products: None known

11. TOXICOLOGICAL INFORMATION

- 11.1. Inhalation: Antimony oxide is a possible carcinogen.
Chronic exposure to tin oxide dust may induce Stannosis (a form of pneumoconiosis)

Occupational Exposure Limits for dried material:

Antimony oxide: 0.5mg m⁻³ (as Sb) 8 hour time weighted average

Tin oxide: 2mg m⁻³ (as Sn) 8 hour time weighted average
4mg m⁻³ (as Sn) 10 minute short-term limit

- 11.2. Ingestion: Non-toxic
- Antimony oxide: LD₅₀ > 34.6 gms/kg body weight
Tin (IV) oxide: LD₅₀ > 2.0 gms/kg body weight

- 11.3. Skin contact: May cause irritation

- 11.4. Eye contact: May cause irritation

12. ECOLOGICAL INFORMATION

- 12.1. Environmental effect: The mixed metal oxide of tin and antimony is practically insoluble in water, and is stable and inert under normal environmental conditions

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, incineration or recycling

14. TRANSPORT INFORMATION

- 14.1. Special precautions: None

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Page: 4 of 4

STANOSTAT DISPERSION

15. REGULATORY INFORMATION

15.1. Risk Phrases: R40 - Limited evidence of a Carcinogenic effect

15.2. Safety Phrases: S36 - Wear suitable protective clothing

15.3. Classification Symbol: Xn - HARMFUL

16. OTHER INFORMATION

16.1. If this product is dried the user should be aware of the hazards from inhalation, as outlined in Section 11 of this Material Safety Data Sheet. Appropriate dust control measures should be adopted