



MATERIAL SAFETY DATA SHEET

1. CHEMICAL IDENTITY

Finished Product : TORSEMIDE

2. COMPOSITION/INFORMATION

C.A.S.NO : 56211-40-6 **Molecular formula** : $C_{16}H_{20}N_4O_3S$ **Molecular Weight** : 348.4 g/mol

3. HAZARDS IDENTIFICATION

No Specific hazard identified Slightly hazardous to water and ground.

4. FIRST AID MEASURES

Skin Contact: Immediately wash skin with soap and copious amounts of water for at least 15 minutes.

Eyes Contact: Immediately flush eyes with eyelids open with copious amounts of water for at least 15 minutes.

Inhalation: Remove to fresh air

Ingestion: Rinse mouth with water, provided the person is conscious

5. FIRE FIGHTING MEASURES

Extinguishing Media: Water spray, Carbon dioxide, dry chemical powder or appropriate foam

Unusual fire and explosion hazards: Emits toxic fumes under fire conditions.

Special fire fighting procedures Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Inflammable substance.

Flash Point : LEL : Not Available UEL : Not Available **Auto Ignition Temperature :** Not Available



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6. ACCIDENTAL RELEASE

Wear respirator, Chemical safety goggles, rubber boots and heavy rubber gloves Sweep up, place in a bag and hold for waste disposal Avoid raising dust Ventilate area and wash spill site after material pick up is complete Avoid spillage onto sewage systems

7. HANDLING AND STORAGE

Handling : Compatible chemical-resistant gloves. Chemical safety goggles. Use appropriate respiratory protection Mechanical exhaust required Safety shower and eye-bath. Wash thoroughly after handling Avoid dust generation Take precautionary measures against static discharges.

Storage : Store away fro incompatible materials, Store Containers at room temperature 15-30 °C. Protect from light. Do not discoloured solutions. Read instructions Provide with the product prior to use.

8. EXPOSURE CONTROL/PERSONAL PROTECTION

TLV : Not Available

Engineering Controls: Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit

Personal Protection: Splash goggles. Lab coat. Dust respirator. Be sure to use an NOISH approved/certified respirator or equivalent. Gloves. Ensure Eyewash /Safety shower stations are available near areas this product is used.

Ventilation: Adequate Local exhaust is recommended.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : White or almost white powder

Odour : Not Available

Solubility: Practically in Soluble in water, Slightly Soluble in ethanol, Sparingly soluble in dilute solutions of alkali hydroxides and slightly soluble in dilute acids.

Melting point: Not Available

pH

: Not available



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Vapour Density : Not Available Vapour Pressure (mm Hg): Not Available Specific Gravity : Not Available
(Air = 1)

10. STABILITY AND REACTIVITY

Chemical Stability: This product is stable under normal condition.

Conditions to Avoid: Incompatible materials.

Incompatibilities with Other Materials: Strong oxidisers, Strong acids, and substances that are incompatible with water.

Hazardous Decomposition Products: Thermal decomposition of this product may produce carbon oxides, Nitrogen oxides and hydrogen chloride.

Hazardous Polymerisation: Will not occur

11. TOXICOLOGICAL INFORMATION

LD 50: oral, rat : >5 000 mg/kg

12. ECOLOGICAL INFORMATION

Not Available

13. DISPOSAL CONSIDERATION

Dissolve or mix material with a suitable combustible solvent and incinerate in a chemical incinerator equipped with an afterburner and scrubber. Material should be disposed of in keeping with all local and national legislation. Packaging should be disposed of in keeping with all local and national legislation. Handle contaminated containers as product.

14. TRANSPORTATION INFORMATION

This product is not considered as a dangerous goods as per regulations of transport.



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15. REGULATORY INFORMATION

Not Available.

16. OTHER INFORMATION

Not Available.

Compiled by : C. Meeey

Date : 20/04/2006

Checked by : B. S. Me

Date : 21/04/2006