IDENTIFICATION

MSDS Record Number: 5618122
Product Name(s): 2-MERCAPTOETHANOL
Product Identification: MSDS NUMBER: M1209
                     PRODUCT CODE: 4049
                     C.A.S. NUMBER: 60-24-2
Date of MSDS: 2007-07-03
Currency Note: This MSDS was acquired from the supplier on 2007-09-06.

MANUFACTURER/SUPPLIER INFORMATION

Company: MALLINCKRODT BAKER INC

MATERIAL SAFETY DATA

Effective Date: 07/03/07
Supercedes: 05/07/07

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MSDS MATERIAL SAFETY DATA SHEET
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From: Mallinckrodt Baker, Inc.
222 Red School Lane
Phillipsburg, NJ 08865
Emergency Telephone Number: 908-859-2151

All non-emergency questions should be directed to Customer Service
(1-800-582-2537) for assistance.

J. T. B A K E R

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2-MERCAPTOETHANOL
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1. Product Identification

Synonyms: Thioglycol; 2-Thioethanol, 2-Hydroxyethyl mercaptan;
           Monothioethylene glycol
CAS No: 60-24-2
Molecular Weight: 78.14
Chemical Formula: HSCH2CH2OH
Induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention.

Skin Contact:
Remove any contaminated clothing. Wash skin with soap or mild detergent and water for at least 15 minutes. Get medical attention if irritation develops or persists.

Eye Contact:
Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

5. Fire Fighting Measures

Fire:
Flash point: 74C (165F) OC
Flammable limits in air % by volume:
lel: 2.3; uel: 18
Combustible Liquid and Vapor!

Explosion:
Above flash point, vapor-air mixtures are explosive within flammable limits noted above.

Fire Extinguishing Media:
Water spray, dry chemical, alcohol foam, or carbon dioxide. Water may be ineffective.

Special Information:
In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode. Vapors can flow along surfaces to distant ignition source and flash back.

6. Accidental Release Measures

Ventilate area of leak or spill. Remove all sources of ignition. Wear appropriate personal protective equipment as specified in Section 8. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Contain and recover liquid when possible. Use non-sparking tools and equipment. Collect liquid in an appropriate container or absorb with an inert material (e. g., vermiculite, dry sand, earth), and place in a chemical waste container. Do not use combustible materials, such as saw dust. Do not flush to sewer!

7. Handling and Storage

Protect against physical damage. Outside or detached storage is preferred. Inside storage should be in a standard flammable liquids storage room or cabinet. Separate from oxidizing materials. Storage and use areas should be No Smoking areas. Containers of this material may be hazardous when empty since they retain product residues (vapors, liquid); observe all warnings and precautions listed for the product.

8. Exposure Controls/Personal Protection
Incompatibilities:
Oxidizing agents, moisture. Avoid contact with metals.

Conditions to Avoid:
Heat, ignition sources, moisture, incompatibles.

11. Toxicological Information

Oral rat LD50: 244 mg/Kg; Skin rabbit LD50: 150 mg/Kg; Irritation data:
eye, rabbit: 2 mg Severe; Investigated as a mutagen.

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>NTP Carcinogen</th>
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<tbody>
<tr>
<td>Ethanol, 2-mercapto- (60-24-2)</td>
<td>Yes</td>
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12. Ecological Information

Environmental Fate:
When released into the soil, this material may biodegrade to a moderate extent. When released into the soil, this material is expected to leach into groundwater. When released into the soil, this material is expected to quickly evaporate. When released into water, this material may biodegrade to a moderate extent. This material has a log octanol-water partition coefficient of less than 3.0. This material has an estimated bioconcentration factor (BCF) of less than 100. Volatilization, adsorption and bioconcentration are not expected to be important environmental fate processes. When released into the air, this material is expected to be readily degraded by reaction with photochemically produced hydroxyl radicals. When released into the air, this material is expected to exist in the aerosol phase with a short half-life. When released into the air, this material is expected to be readily removed from the atmosphere by wet deposition.

Environmental Toxicity:
No information found.

13. Disposal Considerations

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations.

Dispose of container and unused contents in accordance with federal, state and local requirements.

14. Transport Information

Domestic (Land, D.O.T.)

Proper Shipping Name: THIOGLYCOL
Hazard Class: 6.1
UN/NA: UN2966
Packing Group: II

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DANGER! MAY BE FATAL IF ABSORBED THROUGH SKIN. HARMFUL IF SWALLOWED OR INHALED. CAUSES IRRITATION TO SKIN, EYES AND RESPIRATORY TRACT. COMBUSTIBLE LIQUID AND VAPOR.

Label Precautions:
Do not breathe vapor.
Do not get in eyes, on skin, or on clothing.
Keep container closed.
Use with adequate ventilation.
Wash thoroughly after handling.
Keep away from heat and flame.

Label First Aid:
In case of eye contact, immediately flush eyes with plenty of water for at least 15 minutes. Call a physician. In case of contact, immediately flush skin with plenty of water for at least 15 minutes. If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. If swallowed, call a physician immediately.

Product Use:
Laboratory Reagent.

Revision Information:
MSDS Section(s) changed since last revision of document include: 3.

Disclaimer:
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