

MSDS

MATERIAL SAFETY DATA SHEET

FOR IN VITRO DIAGNOSTIC USE ONLY

PRODUCT IDENTIFICATION

Trade Name: Synermed Direct Bilirubin Reagent
Catalog Number: IR751

HAZARDOUS INGREDIENTS

The information presented for each chemical entity in this MSDS represents data available for that individual chemical, and not for the reagent mixture.

<u>Chemical Name</u>	<u>%</u>	<u>CAS No.</u>	<u>Hazard</u>
Dimethylsulfoxide	48%	67-68-5	Irritant
Hydrochloric Acid	1%	7647-01-0	Irritant

DIMETHYLSULFOXIDE

PHYSICAL AND CHEMICAL CHARACTERISTICS

Physical State: Liquid
Boiling Point: 189EC
Specific Gravity: 1.098
Melting Point: 18EC
Solubility in Water: Miscible
Appearance and Odor: Clear, colorless liquid, characteristic odor.

PHYSICAL HAZARD

Flash Point: 95EC
Fire and Explosion: Flammable
Extinguishing Media: Water, dry chemical powder or CO₂.
Stability: Stable
Incompatibility: Acyl halides, oxidizing agents, non-metal halides, dinitrogen tetroxide and hydrides.
Haz. Decom. Prod: Emits toxic fumes under fire conditions. CO and CO₂.

HEALTH HAZARDS

Route of entry: Skin, inhalation and ingestion
Signs of exposure: Skin, eyes and inhalation - may irritate eyes and skin. May irritate mucous membranes. Material is readily absorbed through the skin.
Acute Exposure Effects: Nausea, vomiting, jaundice, dermatitis, eye or respiratory irritation.
Toxicity: LD50 oral (rat) 14,500 mg/kg
Skin, rabbit 500mg/24H - moderate.
Threshold Limit: None established
Carcinogenicity: IARC Monograph? No
NTP? No
OSHA regulated? No

PRECAUTIONS FOR SAFE HANDLING

Spill response: Dike and absorb spill with sand or vermiculite and place in closed container for disposal. Ventilate area and wash spill site after cleanup.
Waste disposal: Follow all federal, state and local laws.

CONTROL MEASURES

Respiratory Protection: Mask or OSHA/MSHA approved organic vapor respirator if conditions warrant.
Ventilation: Mechanical
Eye Protection: Safety goggles
Skin Protection: Chemical resistant gloves.

HYDROCHLORIC ACID

PHYSICAL AND CHEMICAL CHARACTERISTICS

Physical State: Liquid
Boiling Point: 110EC
Specific Gravity: 1.19
Melting Point: -26EC
Solubility in Water: Complete
Appearance and Odor: Clear, colorless or yellow; fuming liquid.
Odor Threshold: 5 ppm

PHYSICAL HAZARD

Flash Point: N/A
Fire and Explosion: Non - flammable
Extinguishing Media: Media appropriate for surrounding fire.
Stability: Stable
Incompatibility: Metals, water, strong bases, amines, carbonates, metal oxide.
Reactivity conditions: Heat; moisture
Haz. Combustion Prod: Emits hydrogen chloride gas under fire conditions.

HEALTH HAZARDS

Route of entry: Skin contact, skin absorption, eye contact, inhalation (chronic and acute) and ingestion
Acute Exposure Effects: May cause severe burns to skin and eyes. Inhalation of vapors may cause severe irritation of respiratory system; coughing; and difficulty breathing. May be fatal if swallowed.
Chronic Exposure Effects: Tissue damage.
Exposure Limits: 5 ppm

LC50 of Product: (RAT/INHL/1H) 3124 ppm
Toxicity: LD50 (rabbit/oral) 900 mg/kg; (mouse/IPR) 40mg/kg
Threshold Limit: None established
Carcinogenicity: IARC Monograph? No
NTP? No
OSHA regulated? No

EMERGENCY FIRST AID

1. Inhalation - Move to fresh air. If not breathing, give CPR. If breathing is difficult, give oxygen. Call a physician.
2. Eyes and Skin - Flush with copious amounts of water for at least 15 minutes while removing contaminated clothing. Assure adequate flushing of eyes by separating eyelids with fingers. Call a physician.
3. Ingestion - Do not induce vomiting. Give water, milk; or milk of magnesia. Immediately call a physician
4. General - Material is very dangerous and should only be handled by qualified and trained personnel. In case of accident get medical attention immediately.

PRECAUTIONS FOR SAFE HANDLING

Gloves:	Acid resistant
Respiratory:	NIOSH/MSHA-approved respirator.
Eye:	Safety goggles
Footwear:	Rubber boots
Clothing:	Protective Suit
Other:	Eyewash station and safety shower in work area.
Engineering Controls:	Adequate ventilation or exhaust to minimize mist and vapors.
Spill response:	Wear self-contained breathing apparatus and full protective clothing. Stop leak if you can do so without risk. Ventilate area. Neutralize spill with soda ash or lime. With clean shovel place material into clean, dry container and cover. Ventilate area and flush spill area with water.
Waste disposal:	Follow all federal, state and local environmental laws.
Storage Requirements:	Keep container tightly closed in a cool dry well-ventilated corrosion-proof area.
Shipping:	Corrosive

CONTROL MEASURES

Respiratory Protection:	Mask or OSHA/MSHA approved organic vapor respirator if conditions warrant.
Ventilation:	Mechanical
Eye Protection:	Safety goggles
Skin Protection:	Chemical resistant gloves.

MANUFACTURER'S NAME AND ADDRESS

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DATE OF PREPARATION OR LAST REVISION

February 26, 2007

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