

Last Revision Date: 11/15/2012

SECTION 1 - CHEMICAL PRODUCT and COMPANY IDENTIFICATION

Catalog Number: S-11159M1
Description: Benzidine-d8 in Methanol
Product Type: Solution
Other Names: 1.1'-Biphenyl-4.4'-diamine-d8

Supplied by CHEM SERVICE, Inc. PO BOX 599, WEST CHESTER, PA 19381 (610)-692-3026
EMERGENCY PHONE: 1-610-692-3026

SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS

CAS: Not Available
Description: Benzidine-d8 Solution
Concentration: 100ug/ml in Methanol
EINECS No: Not Available
Hazard Symbols: Not Available

SECTION 3 - HAZARDS IDENTIFICATION

Contact lenses should not be worn in the laboratory.
All chemicals should be considered hazardous – Avoid direct physical contact!

For the solvent Methanol:

Health Risks: May be fatal if absorbed through the skin! Repeated exposure to vapors and/or dust can cause eye injury. May be fatal if inhaled! Can cause cardiovascular system injury. Exposure can cause liver damage. Exposure can cause kidney damage. May be fatal or cause blindness if swallowed. Can cause gastro-intestinal disturbances. Can cause convulsions.

CA Proposition 65: Data Not Available

For the minor component Benzidine-d8:

This chemical is considered to be a CARCINOGEN by the state of California.

SECTION 4 - FIRST AID MEASURES

An antidote is a substance intended to counteract the effect of a poison. It should be administered only by a physician or trained emergency personnel. Medical advice can be obtained from a POISON CONTROL CENTER.

For the solvent Methanol:

First Aid: In case of contact: Flush eyes continuously with water for 15-20 minutes. Flush skin with water for 15-20 minutes. If patient has stopped breathing administer artificial respiration. If patient is in cardiac arrest administer CPR. Continue life supporting measures until medical assistance has arrived. Do not wear shoes or clothing until absolutely free of all chemical odors. Get medical attention if necessary. If no burns have occurred-use soap and water to cleanse skin. If inhaled remove patient to fresh air. Administer oxygen if patient is having difficulty breathing. If swallowed do not induce vomiting.

SECTION 5 - FIRE AND EXPLOSION DATA

For the solvent Methanol:

Flash Point: 11°C This is a flammable chemical.
Extinguishing Media: Carbon dioxide or dry chemical powder. DO NOT USE WATER!
Upper Explosion Limit: 36%
Lower Explosion Limit: 6.0%

Autoignition Temperature: 464°C
NFPA Hazard Rating: Health: 1 Reactivity: 0 Flammability: 3 Special: No Data.
NFPA Scale: 0 - Least, 1 - Slight, 2 - Moderate, 3 - High, 4 - Severe

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Spills or leaks: Evacuate area. Wear appropriate OSHA regulated equipment. Ventilate area. Absorb on vermiculite or similar material. Sweep up and place in an appropriate container. Hold for disposal. Wash contaminated surfaces to remove any residues. Remove contaminated clothing and wash before reuse.

SECTION 7 - HANDLING AND STORAGE

Handling:

This chemical should be handled only in a hood. Eye shields should be worn. Use appropriate OSHA/MSHA approved safety equipment. Avoid contact with skin, eyes and clothing. Avoid ingestion and inhalation. Wash thoroughly after handling.

Storage:

Store in a cool dry place. Store only with compatible chemicals. Keep tightly closed.

SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

For the solvent Methanol:

OSHA PEL (TWA): 200 ppm (260 mg/m³)
ACGIH TLV (TWA): 200 ppm (262 mg/m³)
ACGIH TLV (STEL): Data Not Available

Personal Protective Equipment

Eyes: Wear Safety Glasses.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to minimize contact with skin.

Respirators: A respiratory protection program that meets OSHA's 29 CFR 1910.134 requirements must be followed whenever workplace conditions warrant the use of a respirator.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

For the solvent Methanol:

Color: Colorless
Phase: Liquid
Melting Point: -98°C
Boiling Point: 64.6°C
Specific Gravity: 0.791g/mL
Vapor Density: 1.11
Vapor Pressure: 130.3 hPa @ 20°C
Solubility in Water: Completely miscible.
Odor: Data Not Available
Evaporation Rate (Butyl acetate=1): Data Not Available
Molecular Weight: 32.05
Molecular Formula: CH₄O

SECTION 10 - STABILITY AND REACTIVITY

For the solvent Methanol:

Flammable. Reacts with Acid halides and anhydrides. Incompatible with strong acids. Incompatible with strong reducing agents. Incompatible with strong oxidizing agents. Decomposition liberates toxic fumes. Hygroscopic. Incompatible with active metals (e.g. Sodium).

SECTION 11 - TOXICOLOGY INFORMATION

Since this solution contains a very low concentration of active component, the primary hazard is from the solvent.

For the solvent Methanol:

RTECS: PC1400000
Oral Rat or Mouse LD50: 5628 mg/kg
Dermal Rat or Mouse LD50: N/A
Rat or Mouse LC50 : 64000 ppm/8H

Carcinogenicity

OSHA: No IARC: No NTP: No ACGIH: No A4 NIOSH: No Other: No

For the minor component Benzidine-d8:

The LD50 for the minor component: Not Available

Carcinogenicity:

OSHA: Yes IARC: Yes NTP: Yes ACGIH: Yes NIOSH: Yes Other: No

This chemical is considered to be a CARCINOGEN by the state of California.

SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity: Not Available
Environmental Fate: Not Available

SECTION 13 - DISPOSAL CONSIDERATIONS

Dispose in accordance with Federal, State and Local regulations.

SECTION 14 - TRANSPORTATION INFORMATION

For the solvent Methanol:

UN Number: UN1230
Class: 3
Packing Group: II
Proper Shipping Name: Methanol

SECTION 15 - REGULATORY INFORMATION

For the solvent Methanol:

European Labeling in Accordance with EC Directives

Hazard Symbols: T F

Risk Phrases: R11: Highly Flammable.
R23/25: Toxic by inhalation, and if swallowed.

Safety Phrases: S16: Keep away from sources of ignition - No smoking.
S2: Keep out of reach of children
S24: Avoid contact with the skin
S45: In case of accident or if you feel unwell, seek medical advice immediately (show label where possible).
S7: Keep container tightly closed

SECTION 16 - OTHER INFORMATION

The above information is believed to be correct on the date it was last revised and must not be considered all inclusive. The information has been obtained only by a search of available literature and is

only a guide for handling the chemicals. OSHA regulations require that if other hazards become evident, an upgraded MSDS must be made available to the employee within three months. RESPONSIBILITY for updates lies with the employer and not with CHEM SERVICE, Inc.

Persons not specifically and properly trained should not handle this chemical or its container. This product is furnished FOR LABORATORY USE ONLY! Our products may NOT BE USED as drugs, cosmetics, agricultural or pesticide products, food additives or as household chemicals.

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