Material Safety Data Sheet

Last Revision Date: 8/15/2012

SECTION 1 - CHEMICAL PRODUCT and COMPANY IDENTIFICATION

Catalog Number: S-11691M1

Description: Diethofencarb in Methanol

Product Type: Solution

Other Names: Isopropyl 3,4-diethoxycarbanilate/1-Methylethyl (3,4-diethoxyphenyl)

carbamate/Isopropyl 3,4-diethoxyphenylcarbamate/Powmyl WP

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: 87130-20-9

Description: Diethofencarb Solution Concentration: 100ug/ml in Methanol

EINECS No: 403-870-3

Hazard Symbols: Xi

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 Diethofencarb: CA Proposition 65: Data not available.

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%

Catalog Number: S-11691M1 Page 1 of 4

Material Safety Data Sheet

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).

Catalog Number: S-11691M1 Page 2 of 4

Material Safety Data Sheet

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: PC1400000 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 Diethofencarb:

The LD50 for the minor component:

ANALYTE LD50 Diethofencarb 5000 mg/kg

CA Proposition 65: Data not available.

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

Catalog Number: S-11691M1 Page 3 of 4

Material Safety Data Sheet

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.

This Material Safety Data Sheet (MSDS) is intended only for use with Chem Service, Inc. products and should not be relied on for use with materials from any other supplier even if the chemical name(s) on the product are identical! Whenever using an MSDS for a solution or mixture the user should refer to the MSDS for every component of the solution or mixture. Chem Service warrants that this MSDS is based upon the most current information available to Chem Service at the time it was last revised. THIS WARRANTY IS EXCLUSIVE, AND CHEM SERVICE, INC. MAKES NO OTHER WARRANTY, EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE. This MSDS is provided gratis and CHEM SERVICE, INC. SHALL NOT BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL OR CONTINGENT DAMAGES.

Copyright © 2000-2011 Chem Service, Inc. All rights reserved except that this MSDS may be printed for the use of a customer or prospective customer of Chem Service, Inc provided the entire MSDS is printed. The MSDS may not be placed in any database or otherwise stored or distributed in electronic or any other form.

This product is furnished FOR LABORATORY USE ONLY!

Catalog Number: S-11691M1 Page 4 of 4