

MSDS	Material Safety Data Sheet	24 Hour Emergency Telephone: 908-859-2151 CHEMTREC: 1-800-424-9300
		National Response in Canada CANUTEC: 613-996-6666
From: Mallinckrodt Baker, Inc. 222 Red School Lane Phillipsburg, NJ 08865		Outside U.S. and Canada Chemtrec: 703-527-3887
Mallinckrodt CHEMICALS		NOTE: CHEMTREC, CANUTEC and National Response Center emergency numbers to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure or accident involving chemicals.
J.T. Baker		
All non-emergency questions should be directed to Customer Service (1-800-582-2637) for assistance.		

DICHLORODIMETHYLSILANE

1. Product Identification

Synonyms: Silane, dichlorodimethyl; Inerton; dimethyldichlorosilane
CAS No.: 75-78-5
Molecular Weight: 129.07
Chemical Formula: (CH₃)₂Cl₂Si
Product Codes:
J.T. Baker: H061
Mallinckrodt: 4886

2. Composition/Information on Ingredients

Ingredient	CAS No	Percent	Hazardous
Dimethyldichlorosilane	75-78-5	90 - 100%	Yes

3. Hazards Identification

Emergency Overview

DANGER! EXTREMELY FLAMMABLE LIQUID AND VAPOR. VAPOR MAY CAUSE FLASH FIRE. WATER REACTIVE. CORROSIVE. MAY BE FATAL IF SWALLOWED. HARMFUL IF INHALED OR ABSORBED THROUGH SKIN. MATERIAL IS EXTREMELY DESTRUCTIVE TO THE UPPER RESPIRATORY TRACT, EYES AND SKIN. CAUSES SEVERE BURNS TO EVERY AREA OF CONTACT.

SAF-T-DATA^(tm) Ratings (Provided here for your convenience)

Health Rating: 3 - Severe (Life)
Flammability Rating: 3 - Severe (Flammable)
Reactivity Rating: 3 - Severe (Water Reactive)
Contact Rating: 3 - Severe (Corrosive)
Lab Protective Equip: GOGGLES & SHIELD; LAB COAT & APRON; VENT HOOD; PROPER GLOVES; CLASS B EXTINGUISHER
Storage Color Code: Red Stripe (Store Separately)

Potential Health Effects

Inhalation:

Inhalation of vapors irritates the mucous membranes and may cause lung injury. Symptoms may include labored breathing, shortness of breath, chest pain and pulmonary edema. Onset of symptoms may be delayed several hours.

Ingestion:

May be fatal if swallowed. Swallowing causes severe gastrointestinal damage to occur. Causes severe burns of the mouth and stomach.

Skin Contact:

Severe burns may occur from even a short time of contact. May be absorbed through the skin.

Eye Contact:

Eye contact produces severe burns, pain, swelling, corneal erosions and possibly blindness.

Chronic Exposure:

No information found.

Aggravation of Pre-existing Conditions:

No information found.

4. First Aid Measures

Inhalation:

Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

Ingestion:

If swallowed, DO NOT INDUCE VOMITING. Give large quantities of water. Never give anything by mouth to an unconscious person. Get medical attention immediately.

Skin Contact:

Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Call a physician, immediately. Wash clothing before reuse.

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: -3C (27F) CC

Autoignition temperature: > 399C (> 750F)

Flammable limits in air % by volume:

lcl: 3.4; ucl: 9.5

Extremely Flammable.

Explosion:

Above flash point, vapor-air mixtures are explosive within flammable limits noted above. Sealed containers may rupture when heated. Contact with strong oxidizers may cause fire. Sensitive to static discharge.

Fire Extinguishing Media:

Dry chemical, alcohol foam or carbon dioxide. Water spray may be used to keep fire exposed containers cool. Do not get water inside container.

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. This highly flammable liquid must be kept from sparks, open flame, hot surfaces, and all sources of heat and ignition.

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! Runoff to sewer may create fire or explosion hazard. Do not allow contact with water. Do not touch any spilled material.

J. T. Baker SOLUSORB® solvent adsorbent is recommended for spills of this product.

7. Handling and Storage

Protect against physical damage. Store in a cool, dry well-ventilated location, away from any area where the fire hazard may be acute. Outside or detached storage is preferred. Separate from incompatibles. Containers should be banded and grounded for transfers to avoid static sparks. Storage and use areas should be No Smoking areas. Use non-sparking type tools and equipment, including explosion proof ventilation. 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

Airborne Exposure Limits:

- AIHA Workplace Environmental Exposure Level (WEEL):
ceiling limit is 2 ppm (10.6 mg/m³)

Ventilation System:

A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, *Industrial Ventilation, A Manual of Recommended Practices*, most recent edition, for details.

Personal Respirators (NIOSH Approved):

For conditions of use where exposure to the substance is apparent and engineering controls are not feasible, consult an industrial hygienist. For emergencies, or instances where the exposure levels are not known, use a full-facepiece positive-pressure, air-supplied respirator. WARNING: Air purifying respirators do not protect

workers in oxygen-deficient atmospheres.

Skin Protection:

Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

Eye Protection:

Use chemical safety goggles and/or a full face shield where splashing is possible. Maintain eye wash fountain and quick-drench facilities in work area.

9. Physical and Chemical Properties

Appearance:

Clear, colorless liquid.

Odor:

Sharp irritating odor.

Solubility:

Decomposes in water.

Specific Gravity:

1.07 @ 25C.

pH:

No information found.

% Volatiles by volume @ 21C (70F):

100

Boiling Point:

70C (158F)

Melting Point:

-86C (-123F)

Vapor Density (Air=1):

4.45

Vapor Pressure (mm Hg):

100 @ 17.5C (64F)

Evaporation Rate (BuAc=1):

3.3

10. Stability and Reactivity

Stability:

Stable under ordinary conditions of use and storage. Water reactive.

Hazardous Decomposition Products:

Hydrogen chloride gas and phosgene gas may be formed upon heating.

Hazardous Polymerization:

Will not occur.

Incompatibilities:

Reacts vigorously with water to generate hydrogen chloride. Strong oxidizers.

Conditions to Avoid:

Heat, flames, ignition sources and incompatibles.

11. Toxicological Information

Oral rat LD50:5660uL/Kg.

Inhalation rat LC50: 930 ppm/4H.

Investigated as a mutagen.

-----\Cancer Lists\-----			
Ingredient	---NTP Carcinogen---		IARC Category
	Known	Anticipated	
Dimethyldichlorosilane (75-78-5)	No	No	None

12. Ecological Information

Environmental Fate:

When released into the soil, this material is expected to quickly evaporate. When released into water, this material will react vigorously, releasing hydrogen chloride and phosgene. This material is not expected to significantly bioaccumulate. When released into the air, this material will react readily with atmospheric moisture, releasing hydrogen chloride and phosgene.

Environmental Toxicity:

No information found.

13. Disposal Considerations

Whatever cannot be saved for recovery or recycling should be handled as hazardous waste and sent to a RCRA approved waste 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: DIMETHYLDICHLOROSILANE
Hazard Class: 3, 8
UN/NA: UN1162
Packing Group: II
Information reported for product/size: 100ML

International (Water, I.M.O.)

Proper Shipping Name: DIMETHYLDICHLOROSILANE
Hazard Class: 3, 8
UN/NA: UN1162
Packing Group: II
Information reported for product/size: 100ML

International (Air, I.C.A.O.)

Proper Shipping Name: DIMETHYLDICHLOROSILANE
Hazard Class: 3, 8
UN/NA: UN1162
Packing Group: II
Information reported for product/size: 100ML

15. Regulatory Information

-----\Chemical Inventory Status - Part 1\-----				
Ingredient	TSCA	EC	Japan	Australia
Dimethyldichlorosilane (75-78-5)	Yes	Yes	Yes	Yes

-----\Chemical Inventory Status - Part 2\-----				
Ingredient	Korea	DSL	NDSL	Phil.
Dimethyldichlorosilane (75-78-5)	Yes	Yes	No	Yes

-----\Federal, State & International Regulations - Part 1\-----				
Ingredient	-SARA 302-		-SARA 313-	
	RQ	TPQ	List	Chemical Catg.
Dimethyldichlorosilane (75-78-5)	500	500	No	No

-----\Federal, State & International Regulations - Part 2\-----				
Ingredient	-RCRA-		-TSCA-	
	CERCLA	261.33	8(d)	
Dimethyldichlorosilane (75-78-5)	1	No	No	

Chemical Weapons Convention: No TSCA 12(b): No CDTA: No
SARA 311/312: Acute: Yes Chronic: Yes Fire: Yes Pressure: No
Reactivity: Yes (Pure / Liquid)

Australian Hazchem Code: 4WE

Poison Schedule: None allocated.

WHMIS:

This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

16. Other Information

NFPA Ratings: Health: 3 Flammability: 3 Reactivity: 1

Label Hazard Warning:

DANGER! EXTREMELY FLAMMABLE LIQUID AND VAPOR. VAPOR MAY CAUSE FLASH FIRE. WATER REACTIVE. CORROSIVE. MAY BE FATAL IF SWALLOWED. HARMFUL IF INHALED OR ABSORBED THROUGH SKIN. MATERIAL IS EXTREMELY DESTRUCTIVE TO THE UPPER RESPIRATORY TRACT, EYES AND SKIN. CAUSES SEVERE BURNS TO EVERY AREA OF CONTACT.

Label Precautions:

Do not breathe vapor.

Do not get in eyes, on skin, or on clothing.

Keep container closed.
Use only with adequate ventilation.
Wash thoroughly after handling.
Keep away from heat, sparks and flame.
Do not contact with water.

Label First Aid:

In case of eye contact, immediately flush eyes with plenty of water for at least 15 minutes. In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. If swallowed, DO NOT INDUCE VOMITING. Give large quantities of water. Never give anything by mouth to an unconscious person. In all cases get medical attention immediately.

Product Use:

Laboratory Reagent.

Revision Information:

No Changes.

Disclaimer:

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