



MATERIAL SAFETY DATA SHEET
Dichlorodimethylsilane

Section 1 - Chemical Product and Company Identification

MSDS Name:	Dichlorodimethylsilane
Catalog Numbers:	11331-0000, 11331-0010, 11331-0050, 11331-2500
Synonyms:	Dimethyldichlorosilane; DMDCS
Company Identification:	Acros Organics BVBA Janssen Pharmaceuticaaan 3a 2440 Geel, Belgium
Company Identification: (USA)	Acros Organics One Reagent Lane Fair Lawn, NJ 07410
For information in the US, call:	800-ACROS-01
For information in Europe, call:	+32 14 57 52 11
Emergency Number, Europe:	+32 14 57 52 99
Emergency Number US:	201-796-7100
CHEMTREC Phone Number, US:	800-424-9300
CHEMTREC Phone Number, Europe:	703-527-3887

Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name:	%	EINECS#
75-78-5	Dichlorodimethylsilane	99+%	200-901-0

Hazard Symbols: XI F



Risk Phrases:

11 36/37/38

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Highly flammable. Irritating to eyes, respiratory system and skin.

Potential Health Effects

Eye: Causes severe eye irritation. Lachrymator (substance which increases the flow of tears).

Skin: Causes skin burns. May be harmful if absorbed through the skin.

Ingestion: May cause irritation of the digestive tract.

Inhalation: Harmful if inhaled. Causes chemical burns to the respiratory tract.

Chronic:

Section 4 - First Aid Measures

Eyes: Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

Skin: Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

Ingestion: Get medical aid. Wash mouth out with water.

Inhalation: Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Notes to Physician: Treat symptomatically and supportively.

Section 5 - Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Vapors can travel to a source of ignition and flash back. Will burn if involved in a fire. Water Reactive. Material will react with water and may release a flammable and/or toxic gas. Flammable liquid and vapor.

Extinguishing Media: Use carbon dioxide or dry chemical. DO NOT USE WATER!

Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Wear a self contained breathing apparatus and appropriate personal protection. (See Exposure Controls, Personal Protection section). Remove all sources of ignition. Use a spark-proof tool. Do not expose spill to water. Do not let this chemical enter the environment.

Section 7 - Handling and Storage

Handling: Do not allow water to get into the container because of violent reaction. Use spark-proof tools and explosion proof equipment. Avoid breathing dust, vapor, mist, or gas. Avoid contact with skin and eyes. Avoid ingestion and inhalation. Handle under an inert atmosphere. Do not allow contact with water. Use only in a chemical fume hood.

Storage: Keep away from sources of ignition. Store in a tightly closed container. Store in a dry area. Flammables-area. Keep refrigerated. (Store below 4°C/39°F.) Store protected from moisture. Store under an inert atmosphere.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls:

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local explosion-proof ventilation to keep airborne levels to acceptable levels.

Exposure Limits

CAS# 75-78-5:

Russia: 1 mg/m³ TWA (aerosol) Russia: 3 mg/m³ STEL (aerosol)

Personal Protective Equipment

Eyes: Wear chemical splash goggles.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respirators: Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Section 9 - Physical and Chemical Properties

Physical State:	Liquid
Color:	clear colorless to slightly yellow
Odor:	pungent odor
pH:	Not available
Vapor Pressure:	150hPa @20 deg C
Viscosity:	0.6 cP @25 deg C
Boiling Point:	70 deg C @760mmHg (158.00°F)

Freezing/Melting Point:	-76 deg C (-104.80°F)
Autoignition Temperature:	460 deg C (860.00 deg F)
Flash Point:	-9 deg C (15.80 deg F)
Explosion Limits: Lower:	4 Vol %
Explosion Limits: Upper:	3 Vol %
Decomposition Temperature:	
Solubility in water:	Reacts
Specific Gravity/Density:	1.060
Molecular Formula:	C ₂ H ₆ Cl ₂ Si
Molecular Weight:	129.06

Section 10 - Stability and Reactivity

Chemical Stability:	Moisture sensitive.
Conditions to Avoid:	Incompatible materials, ignition sources, exposure to moist air or water.
Incompatibilities with Other Materials	Strong oxidizing agents, acids, strong bases, alcohols, amines, esters (e.g. butyl acetate, ethyl acetate, propyl formate), acetone, aldehydes, ketones.
Hazardous Decomposition Products	Hydrogen chloride, carbon monoxide, carbon dioxide, oxides of silicon.
Hazardous Polymerization	Has not been reported.

Section 11 - Toxicological Information

RTECS#:	CAS# 75-78-5: VV3150000
LD50/LC50:	<p>RTECS:</p> <p>CAS# 75-78-5: Draize test, rabbit, eye: 5 mg/24H Severe; Draize test, rabbit, skin: 20 mg/24H Moderate; Inhalation, mouse: LC50 = 300 mg/m³/2H; Inhalation, rat: LC50 = 930 ppm/4H; Oral, rat: LD50 = 5660 uL/kg;</p> <p>.</p> <p>Other:</p>
Carcinogenicity:	Dichlorodimethylsilane - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.
Other:	See actual entry in RTECS for complete information.

Section 12 - Ecological Information

Other:	Do not empty into drains.
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Section 13 - Disposal Considerations

Dispose of in a manner consistent with federal, state, and local regulations.

Section 14 - Transport Information

	IATA	IMO	RID/ADR
Shipping Name:	DIMETHYLDICHLOROSILANE	DIMETHYLDICHLOROSILANE	DIMETHYLDICHLOROSILANE

Hazard Class:	3 (8)	3 (8)	3 (8)
UN Number:	1162	1162	1162

**Packing
Group:**

II

II

II

Section 15 - Regulatory Information

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: XI F

Risk Phrases:

R 11 Highly flammable.

R 36/37/38 Irritating to eyes, respiratory system and skin.

Safety Phrases:

WGK (Water Danger/Protection)

CAS# 75-78-5: Not available

Canada

CAS# 75-78-5 is listed on Canada's DSL List

US Federal

TSCA

CAS# 75-78-5 is listed on the TSCA Inventory.

Section 16 - Other Information

MSDS Creation Date:

7/16/1996

Revision #3 Date

1/30/2008

Revisions were made in Sections:

1, 3, 4, 5, 6, 7, 8, 9, 10, 11

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.

Synonym:	Dichlorodimethylsilane solution, Dimethyldichlorosilane solution
CAS Number:	75-78-5
Linear Formula:	C ₂ H ₆ Cl ₂ Si
Molecular Weight:	129.06
Beilstein Registry Number:	605287
MDL number:	MFCD00000491
PubChem Substance ID:	24888310

Description

Other Notes dimethyldichlorosilane/1,1,1-trichloroethane 1/39 (v/v)

Sales restrictions may apply

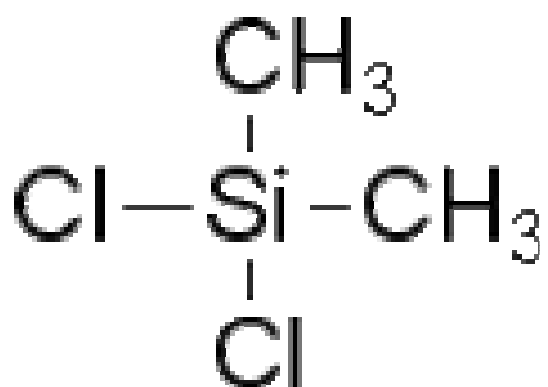
Ready-to-use solution for silanizing micro-electrodes¹

Properties

product line	BioChemika
concentration	~2% dimethyldichlorosilane in 1,1,1-trichloroethane
refractive index	<i>n</i> _{20/D} 1.437
density	1.333 g/mL at 20 °C

Safety

Hazard Codes	Xn
Risk Statements	20-59
Safety Statements	59
RIDADR	UN 2831 6.1/PG 3
WGK Germany	3



【Product Name】

Dichlorodimethylsilane

【Synonyms】

Dichloro(dimethyl)silane
Dichlorodimethylsilane

【CAS】

75-78-5

【Formula】

C₂H₆Cl₂Si

【Molecular Weight】

129.06

【EINECS】

200-901-0

【RTECS】

VV3150000

【RTECS Class】

Primary Irritant

【Beilstein/Gmelin】

605287

【Beilstein Reference】

4-04-00-04111

【EC Index Number】

014-003-00-X

【EC Class】

Highly flammable; Irritant

Physical and Chemical Properties

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【Appearance】

A colorless fuming liquid with a pungent odor.

【Solubility in water】

Insoluble

【Melting Point】

-76

【Boiling Point】

70

【Vapor Pressure】

144 (25 C)

【Density】

1.0745 g/cm³ (20 C)

【Partition Coefficient】

3.18

【Heat Of Vaporization】

29.9 kJ/mol

【Heat Of Combustion】

-1792 kJ/mol

【Usage】

In ethchlorvynol assay.

【Vapor Density】

4.4

【Refractive Index】

1.3998 (20 C)

First Aid Measures

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【Ingestion】

Do NOT induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid immediately.

【Inhalation】

Get medical aid immediately. Remove from exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

【Skin】

Get medical aid immediately. Immediately flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Destroy contaminated shoes.

【Eyes】

Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.

Handling and Storage

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【Storage】

Keep away from sources of ignition. Store in a cool, dry place. Keep refrigerated. Store in a tightly closed container. Keep under a nitrogen blanket. Flammables-area. Do not store in metal containers.

【Handling】

Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use only in a well ventilated area. Use spark-proof tools and explosion proof equipment. Do not get in eyes, on skin, or on clothing. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Take precautionary measures against static discharges. Do not ingest or inhale. Do not allow contact with water. Use only in a

chemical fume hood. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames.

Hazards Identification

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【Ingestion】

May cause severe gastrointestinal tract irritation with nausea, vomiting and possible burns. May be harmful if swallowed.

【Inhalation】

May cause irritation of the respiratory tract with burning pain in the nose and throat, coughing, wheezing, shortness of breath and pulmonary edema. Causes chemical burns to the respiratory tract. Inhalation may be fatal as a result of spasm, inflammation, edema of the larynx and bronchi, chemical pneumonitis and pulmonary edema.

【Skin】

Causes skin burns.

【Eyes】

Causes eye burns. Lachrymator.

【Hazards】

Vapor may explode if ignited in an enclosed area. Reacts vigorously with water to generate hydrogen chloride. Hydrogen chloride and phosgene gases may be formed upon heating or in fire. Runoff to sewer may create fire or explosion hazard.

【EC Risk Phrase】

R 11 36/37/38

【UN (DOT)】

1162

Exposure Controls/Personal Protection

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【Personal Protection】

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166. Skin: Wear appropriate protective gloves to prevent skin exposure. Clothing: Wear a chemical apron. Wear appropriate protective clothing to prevent skin

exposure.

【Respirators】

Follow the OSHA respirator regulations found in 29CFR 1910.134 or European Standard EN 149. Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

【Poison Class】

1

Fire Fighting Measures

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【Flash Point】

-12

【Autoignition】

425

【Fire Fighting】

Wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Reacts violently with water. Contact with metals may evolve flammable hydrogen gas. Extinguishing media: DO NOT USE WATER! Do NOT get water inside containers. For large fires, use water spray, fog or alcohol-resistant foam. For small fires, use carbon dioxide, dry chemical, dry sand, or alcohol-resistant foam. Cool containers with flooding quantities of water until well after fire is out.

【Upper exp. limit】

40

【Lower exp. limit】

3.1

【Fire Potential】

HIGHLY FLAMMABLE: Will be easily ignited by heat, sparks or flames.

Accidental Release Measures

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【Small spills/leaks】

Absorb spill with inert material, (e.g., dry sand or earth), then place into a chemical waste container. Clean up spills immediately, using the appropriate protective equipment. Scoop up with a nonsparking tool, then place into a suitable container for disposal. Remove all sources of ignition. Do not expose spill to water. Do not get water inside containers.

Stability and Reactivity

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【Disposal Code】

24

【Incompatibilities】

Acids, alcohols, amines, strong bases, esters, ketones, aldehydes, acetone, ammonia, and strong oxidizing agents. Reacts violently with water to liberate an acidic gas which in contact with metal surfaces can generate flammable or explosive hydrogen gas.

【Stability】

Stable under normal temperatures and pressures.

【Decomposition】

Hydrogen chloride, chlorine, phosgene, carbon monoxide, irritating and toxic fumes and gases, carbon dioxide, silicon oxide.

【Combustion Products】

Fire will produce irritating, corrosive and/or toxic gases.

Transport Information

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【UN Number】

1162

【Hazard Class】

3

【Packing Group】

II

【HS Code】

2931 00 95