



Material Safety Data Sheet
Hexachlorodisilane, 96%

MSDS# 98889

Section 1 - Chemical Product and Company Identification

MSDS Name: Hexachlorodisilane, 96%
Catalog Numbers: AC313520000, AC313520010, AC313520050
Synonyms: None known.

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#: 13465-77-5
Chemical Name: Hexachlorodisilane
%: 96
EINECS#: 236-704-1

Hazard Symbols: C



Risk Phrases: 14 29 34

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Danger! Corrosive. Water-reactive. Causes eye and skin burns. May cause severe respiratory tract irritation with possible burns. May cause severe digestive tract irritation with possible burns. Reacts violently and/or explosively with water, steam or moisture. Contact with water liberates toxic gas. Target Organs: Respiratory system, eyes, skin, mucous membranes.

Potential Health Effects

Eye: Causes eye burns. May cause chemical conjunctivitis and corneal damage.
Skin: Causes skin burns. May cause skin rash (in milder cases), and cold and clammy skin with cyanosis or pale color.
Ingestion: May cause severe and permanent damage to the digestive tract. Causes gastrointestinal tract burns. May cause perforation of the digestive tract. May cause systemic effects.
Inhalation: 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. Aspiration may lead to pulmonary edema. May cause systemic effects. Inhalation at high concentrations may cause CNS depression and asphyxiation.

Chronic: Effects may be delayed.

Section 4 - First Aid Measures

Eyes: Get medical aid immediately. Do NOT allow victim to rub eyes or keep eyes closed. Extensive irrigation with water is required (at least 30 minutes).

Skin: Get medical aid immediately. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Destroy contaminated shoes. If water-reactive products are embedded in the skin, no water should be applied. The embedded products should be covered with a light oil.

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

Inhalation: Get medical aid immediately. Remove from exposure and move to fresh air immediately. If breathing is difficult, give oxygen. Do NOT use mouth-to-mouth resuscitation. If breathing has ceased apply artificial respiration using oxygen and a suitable mechanical device such as a bag and a mask.

Notes to Physician:

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. Reacts violently with water giving off flammable gas which may explode. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Vapors may be heavier than air. They can spread along the ground and collect in low or confined areas. May ignite or explode on contact with steam or moist air. Contact with metals may evolve flammable hydrogen gas. Containers may explode when heated. May re-ignite after fire is extinguished. Contact with water liberates highly flammable gases. Runoff from fire control or dilution water may cause pollution.

Extinguishing Media: Use dry sand or earth to smother fire. DO NOT USE WATER! Do NOT get water inside containers. Most foams will react with the material and release corrosive/toxic gases. Contact professional fire-fighters immediately. Cool containers with flooding quantities of water until well after fire is out. For fires involving chlorosilanes, an aqueous film forming foam (AFFF) may be used.

Autoignition Temperature: Not applicable.

Flash Point: Not applicable.

Explosion Limits: Lower: Not available

Explosion Limits: Upper: Not available

NFPA Rating: ; Special Hazard: -W-

Section 6 - Accidental Release Measures

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

Spills/Leaks: Avoid runoff into storm sewers and ditches which lead to waterways. Clean up spills immediately, observing precautions in the Protective Equipment section. Provide ventilation. Do not expose spill to water. Do not get water inside containers.

Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Do not allow water to get into the container because of violent reaction. Do not breathe dust, mist, or vapor. Do not get in eyes, on skin, or on clothing. Keep container tightly closed. Do not ingest or inhale. Do not allow contact with water. Use only in a chemical fume hood. Discard contaminated shoes. Keep from contact with moist air and steam.

Storage: Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. Keep away from water. Corrosives area. Storage under a nitrogen blanket has been recommended. Storage for long periods is not recommended.

Section 8 - Exposure Controls, Personal Protection

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Hexachlorodisilane	none listed	none listed	none listed

OSHA Vacated PELs: Hexachlorodisilane: None listed

Engineering Controls:

Use explosion-proof ventilation equipment. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

Exposure Limits

Personal Protective Equipment

Eyes: Wear chemical splash goggles and face shield.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a

Respirators: 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

Odor: Not available

pH: Not available

Vapor Pressure: 12 mm Hg @ 40 deg C

Vapor Density: 9.2

Evaporation Rate: Not available

Viscosity: Not available

Boiling Point: 144 - 146 deg C

Freezing/Melting Point: Not available

Decomposition Temperature: Not available

Solubility in water: Reacts

Specific Gravity/Density: 1.562

Molecular Formula: Cl₃SiSiCl₃

Molecular Weight: 268.89

Section 10 - Stability and Reactivity

Chemical Stability: Combines vigorously or explosively with water. May be shock-sensitive. Reacts with water to form hydrogen chloride, a toxic and corrosive gas.

Conditions to Avoid: Excess heat, temperatures above 150°C, exposure to moist air or water.

Incompatibilities with Other Materials: Oxidizing agents, acids, strong bases, alcohols, water.

Hazardous Decomposition Products: Hydrogen chloride, chlorine, carbon monoxide, carbon dioxide, silicon dioxide.

Hazardous Polymerization: Has not been reported.

Section 11 - Toxicological Information

RTECS#: CAS# 13465-77-5: None listed

LD50/LC50: RTECS: Not available.

Carcinogenicity: Hexachlorodisilane - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.

Other: The toxicological properties have not been fully investigated.

Section 12 - Ecological Information

Not available

Section 13 - Disposal Considerations

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

Section 14 - Transport Information

Shipping Name: CHLOROSILANES, CORROSIVE , N.O.S. (Hexachlorodisilane)
Hazard Class: 8
UN Number: UN2987
Packing Group: II
Canada TDG
Shipping Name: Not available
Hazard Class:
UN Number:
Packing Group:

Section 15 - Regulatory Information

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: C

Risk Phrases:

R 14 Reacts violently with water.

R 29 Contact with water liberates toxic gas.

R 34 Causes burns.

Safety Phrases:

S 8 Keep container dry.

S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S 30 Never add water to this product.

S 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

WGK (Water Danger/Protection)

CAS# 13465-77-5: Not available

Canada

CAS# 13465-77-5 is listed on Canada's NDSL List

Canadian WHMIS Classifications: E, F

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

CAS# 13465-77-5 is not listed on Canada's Ingredient Disclosure List.

US Federal

TSCA

CAS# 13465-77-5 is listed on the TSCA Inventory.

Section 16 - Other Information

MSDS Creation Date: 11/13/1996

Revision #16 Date 7/20/2009

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.
