

Safety Data Sheet SIP6904.0 Date of issue: 09/29/2016 Version: 1.0

#### **SECTION 1: Identification**

#### **Product identifier**

Product name : 1-PROPENYLMETHYLDICHLOROSILANE, 95%

: SIP6904.0 Product code Product form : Substance Physical state : Liquid Formula : C4H8Cl2Si

(DICHLOROMETHYLSILYL)PROP-1-ENE Synonyms

DICHLOROMETHYL-1-PRÓPEN-1-YLSILANE SILANE, DICHLOROMETHYL-1-PROPEN-1-YL-

Chemical family : ORGANOCHLOROSILANE

## Recommended use of the chemical and restrictions on use

Recommended use : Chemical intermediate For research use only

### Details of the supplier of the safety data sheet

#### **GELEST. INC.**

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USA

T 215-547-1015 - F 215-547-2484 - (M-F): 8:00 AM - 5:30 PM EST

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## **Emergency telephone number**

**Emergency number** : CHEMTREC: 1-800-424-9300 (USA); +1 703-527-3887 (International)

# SECTION 2: Hazard(s) identification

#### Classification of the substance or mixture 2.1.

### **GHS-US** classification

Flammable liquids Category 3 H226 Skin corrosion/irritation Category 1B H314 Serious eye damage/eye irritation Category 1 H318

Full text of H statements : see section 16

# **Label elements**

## **GHS-US** labeling

Hazard pictograms (GHS-US)





GHS02

GHS05

Signal word (GHS-US) : Danger

Hazard statements (GHS-US) : H226 - Flammable liquid and vapor

H314 - Causes severe skin burns and eye damage

H318 - Causes serious eye damage

Precautionary statements (GHS-US) P280 - Wear protective gloves/protective clothing/eye protection/face protection

P210 - Keep away from heat, open flames, sparks. - No smoking

P233 - Keep container tightly closed

P240 - Ground/Bond container and receiving equipment P241 - Use explosion-proof electrical equipment

P242 - Use only non-sparking tools

P243 - Take precautionary measures against static discharge

P260 - Do not breathe vapors

P264 - Wash hands thoroughly after handling

P301 + P330 + P331 - If swallowed: rinse mouth. Do NOT induce vomiting

P303 + P361 + P353 - If on skin (or hair): take off immediately all contaminated clothing, rinse

skin with water/shower

P304 + P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing

P310 - Immediately call a doctor

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P321 - Specific treatment (see first aid instructions on this label)

P363 - Wash contaminated clothing before reuse

P370 + P378 - In case of fire: Use water spray, foam, carbon dioxide, dry chemical to

extinguish

P403 + P235 - Keep in a cool place

P405 - Store locked up

P501 - Dispose of contents/container to licensed waste disposal facility

#### 2.3. Hazards not otherwise classified (HNOC)

Other hazards not contributing to the classification

: Hydrogen chloride may be formed by reaction with water and moisture in air. The US OSHA

PEL (TWA) for hydrogen chloride is 5 ppm.

## 2.4. Unknown acute toxicity (GHS US)

No data available

# **SECTION 3: Composition/Information on ingredients**

#### 3.1. Substance

Substance type : Mono-constituen

Name : 1-PROPENYLMETHYLDICHLOROSILANE, 95%

CAS No : 18142-37-5

Name	Product identifier	%	GHS-US classification
1-Propenylmethyldichlorosilane	(CAS No) 18142-37-5	95 - 100	Flam. Liq. 3, H226 Skin Corr. 1B, H314 Eye Dam. 1, H318

Full text of hazard classes and H-statements : see section 16

#### 3.2. Mixture

Not applicable

#### 4.1. Description of first aid measures

First-aid measures general : Remove contaminated clothing and shoes. In case of accident or if you feel unwell, seek

medical advice immediately (show the label where possible). If possible show this sheet; if not

available show packaging or label.

First-aid measures after inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If you feel

unwell, seek medical advice.

First-aid measures after skin contact Wash with plenty of soap and water. Get immediate medical advice/attention.

First-aid measures after eye contact : Immediately flush eyes thoroughly with water for at least 15 minutes. Remove contact lenses, if

present and easy to do. Continue rinsing. Get immediate medical advice/attention.

First-aid measures after ingestion : Never give anything by mouth to an unconscious person. Get medical advice/attention if you

feel unwell.

## 4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries : Causes severe skin burns and eye damage.

Symptoms/injuries after inhalation : May cause irritation to the respiratory tract.

Symptoms/injuries after skin contact : Causes (severe) skin burns.

Symptoms/injuries after eye contact : Causes serious eye damage.

Symptoms/injuries after ingestion : May be harmful if swallowed.

# 4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

# **SECTION 5: Firefighting measures**

# 5.1. Extinguishing media

Suitable extinguishing media : Water spray. Foam. Carbon dioxide. Dry chemical.

Unsuitable extinguishing media : Water.

## 5.2. Special hazards arising from the substance or mixture

Fire hazard : Flammable liquid and vapor. Irritating fumes of hydrogen chloride and organic acid vapors may

develop when material is exposed to water or open flame.

Explosion hazard : May form flammable/explosive vapor-air mixture.

# 5.3. Advice for firefighters

Firefighting instructions : Exercise caution when fighting any chemical fire. Use water spray to cool exposed surfaces.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

Avoid all eye and skin contact and do not breathe vapor and mist.

## **SECTION 6: Accidental release measures**

## 6.1. Personal precautions, protective equipment and emergency procedures

General measures : Eliminate every possible source of ignition. Use special care to avoid static electric charges.

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## 6.1.1. For non-emergency personnel

Protective equipment : Wear protective equipment as described in Section 8.

Emergency procedures : Evacuate unnecessary personnel.

#### 6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. Equip cleanup crew with

proper protection. For further information refer to section 8: "Exposure controls/personal

protection".

#### 6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

#### 6.3. Methods and material for containment and cleaning up

For containment : Contain any spills with dikes or absorbents to prevent migration and entry into sewers or

streams

Methods for cleaning up : Clean up any spills as soon as possible, using an absorbent material to collect it. Use only non-

sparking tools.

#### 6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

## **SECTION 7: Handling and storage**

### 7.1. Precautions for safe handling

Additional hazards when processed : Handle empty containers with care because residual vapors are flammable. Keep away from

heat/sparks/open flames/hot surfaces. - No smoking.

Precautions for safe handling : Avoid all eye and skin contact and do not breathe vapor and mist. Ground/bond container and

receiving equipment. Take precautionary measures against static discharge. Use only outdoors

or in a well-ventilated area. Use only non-sparking tools.

Hygiene measures : Wash contaminated clothing before reuse. Wash hands and other exposed areas with mild

soap and water before eating, drinking or smoking and when leaving work.

#### 7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Proper grounding procedures to avoid static electricity should be followed. Use explosion-proof

electrical equipment.

Storage conditions : Keep container tightly closed. Keep in a cool place. Store locked up.

Incompatible materials : Alcohols. Amines. Oxidizing agent.

Storage area : Store in a well-ventilated place. Store away from heat.

# **SECTION 8: Exposure controls/personal protection**

#### 8.1. Control parameters

No additional information available

## 8.2. Exposure controls

Appropriate engineering controls : Provide local exhaust or general room ventilation.

Personal protective equipment : Avoid all unnecessary exposure. Emergency eye wash fountains and safety showers should be

available in the immediate vicinity of any potential exposure.

Hand protection : Neoprene or nitrile rubber gloves.

Eye protection : Chemical goggles or face shield. Contact lenses should not be worn.

Skin and body protection : Wear suitable protective clothing.

Respiratory protection : Where exposure through inhalation may occur from use, respiratory protection equipment is

recommended. NIOSH-certified combination organic vapor/acid gas (yellow cartridge)

respirator.

# **SECTION 9: Physical and chemical properties**

# 9.1. Information on basic physical and chemical properties

Physical state : Liquid
Appearance : Clear liquid.
Molecular mass : 155.1 g/mol
Color : Straw.

Odor : Acrid. Similar to hydrogen chloride.

Odor threshold : No data available

Refractive index : 1.4395

pH : No data available

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Relative evaporation rate (butyl acetate=1) : No data available Melting point : No data available

Freezing point : < 0 °C Boiling point : 124 - 127 °C Flash point : 28 °C

Auto-ignition temperature : No data available Decomposition temperature : No data available

Flammability (solid, gas) : Flammable liquid and vapor

Vapor pressure : No data available

Relative vapor density at 20 °C : > 1
Relative density : 1.0593

Solubility Reacts with water. Log Pow No data available Log Kow No data available Viscosity, kinematic : No data available : No data available Viscosity, dynamic Explosive properties No data available : No data available Oxidizing properties : No data available **Explosion limits** 

## 9.2. Other information

No additional information available

## **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

No additional information available

#### 10.2. Chemical stability

Stable in sealed containers stored under a dry inert atmosphere.

# 10.3. Possibility of hazardous reactions

Reacts with water and moisture in air, liberating hydrogen chloride.

# 10.4. Conditions to avoid

Heat. Open flame. Sparks.

## 10.5. Incompatible materials

Alcohols. Amines. Oxidizing agent.

# 10.6. Hazardous decomposition products

Hydrogen chloride. Organic acid vapors.

# **SECTION 11: Toxicological information**

## 11.1. Information on toxicological effects

Acute toxicity : Not classified

Skin corrosion/irritation : Causes severe skin burns and eye damage.

Serious eye damage/irritation : Causes serious eye damage.

Respiratory or skin sensitization : Not classified Germ cell mutagenicity : Not classified Carcinogenicity : Not classified

None of the components in this product at concentrations >0.1% are listed by IARC, NTP,

OSHA or ACGIH as a carcinogen

Reproductive toxicity : Not classified Specific target organ toxicity (single exposure) : Not classified

Specific target organ toxicity (repeated

exposure)

: Not classified

Aspiration hazard : Not classified

Symptoms/injuries after inhalation : May cause irritation to the respiratory tract.

Symptoms/injuries after skin contact : Causes (severe) skin burns.

Symptoms/injuries after eye contact : Causes serious eye damage.

Symptoms/injuries after ingestion : May be harmful if swallowed.

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Reason for classification : Expert judgment

# **SECTION 12: Ecological information**

#### 12.1. Toxicity

No additional information available

#### 12.2. Persistence and degradability

No additional information available

#### 12.3. Bioaccumulative potential

No additional information available

#### 12.4. Mobility in soil

No additional information available

#### 12.5. Other adverse effects

Other adverse effects : This substance may be hazardous to the environment.

Effect on ozone layer : No additional information available

Effect on the global warming : No known effects from this product.

GWPmix comment : No known effects from this product.

## **SECTION 13: Disposal considerations**

#### 13.1. Waste treatment methods

Sewage disposal recommendations : Do not dispose of waste into sewer.

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Dispose of

contents/container to licensed waste disposal facility.

Additional information : Handle empty containers with care because residual vapors are flammable.

Ecology - waste materials : Avoid release to the environment.

# **SECTION 14: Transport information**

## 14.1. UN number

UN-No.(DOT) : 2986 DOT NA no. UN2986

## 14.2. UN proper shipping name

Transport document description : UN2986 Chlorosilanes, corrosive, flammable, n.o.s. (1-

PROPENYLMETHYLDICHLOROSILANE), 8 (3), II

Proper Shipping Name (DOT) : Chlorosilanes, corrosive, flammable, n.o.s.

(1-PROPENYLMETHYLDICHLOROSILANE)

Class (DOT) : 8 - Class 8 - Corrosive material 49 CFR 173.136

Packing group (DOT) : II - Medium Danger
Hazard labels (DOT) : 8 - Corrosive

3 - Flammable liquid



DOT Packaging Non Bulk (49 CFR 173.xxx) : 206
DOT Packaging Bulk (49 CFR 173.xxx) : 243
DOT Packaging Exceptions (49 CFR 173.xxx) : None

## 14.3. Additional information

Emergency Response Guide (ERG) Number : 155

Other information : No supplementary information available.

# Transport by sea

DOT Vessel Stowage Location : C - The material must be stowed "on deck only" on a cargo vessel and on a passenger vessel

DOT Vessel Stowage Other : 40 - Stow "clear of living quarters"

### Air transport

DOT Quantity Limitations Passenger aircraft/rail : Forbidden

(49 CFR 173.27)

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DOT Quantity Limitations Cargo aircraft only (49 : 30 L CFR 175.75)

# **SECTION 15: Regulatory information**

#### 15.1. US Federal regulations

1-DDODENIVI	METHVI	_DICHLOROSII	$VME \sigma$	5% /1	21/2-	27-51

TSCA Exemption/Exclusion

CAUTION: This material is supplied for research and development purposes subject to the R&D exemption under TSCA, 40 CFR 720.36, and must meet the requirements of the exemption, including supervision by a "technically qualified individual" as defined by 40 CFR 720.3(ee). The use of this material for "commercial purposes" as defined by 40 CFR 720.3(r) is not permitted in the United States

### 1-Propenylmethyldichlorosilane (18142-37-5)

Not listed on the United States TSCA (Toxic Substances Control Act) inventory

#### 15.2. International regulations

#### CANADA

No additional information available

#### **EU-Regulations**

No additional information available

#### **National regulations**

No additional information available

### 15.3. US State regulations

No additional information available

# **SECTION 16: Other information**

## Full text of H-phrases::

H226	Flammable liquid and vapor
H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage

Abbreviations and acronyms

Abbreviations: ND: Not Determined, No Data; NA: Not Applicable; LD: Lethal Dose; LC: Lethal Concentration; ATE: Acute Toxicity Estimates; H: hour; occupied: oC unless otherwise stated; mm: millimeters Hg, torr; PEL: permissible exposure level; TWA: time weighted average; TLV: threshold limit value; TG: Test Guideline; NIOSH: National Institute for Occupational Safety and Health; IARC: International Agency for Research on Cancer; NTP: National Toxicology Program; HMIS: Hazardous Material Information System; CAS No.: Chemcial Abstract Service Registration Number; EC No.: European Commission Registration Number; EC Index No.: European Commission Index Number; OECD: The Organisation for Economic Co-operation and Development; GHS: The Globally Harmonized System of Classification and Labelling.

## **HMIS III Rating**

Health : 3 Serious Hazard - Major injury likely unless prompt action is taken and medical treatment is

Flammability : 3 Serious Hazard - Materials capable of ignition under almost all normal temperature

conditions. Includes flammable liquids with flash points below 73 F and boiling points above

100 F. as well as liquids with flash points between 73 F and 100 F. (Classes IB & IC) Physical

1 Slight Hazard - Materials that are normally stable but can become unstable (self-react) at high temperatures and pressures. Materials may react non-violently with water or undergo

hazardous polymerization in the absence of inhibitors.

Prepared by safety and environmental affairs.

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SDS US (GHS HazCom 2012) - Custom

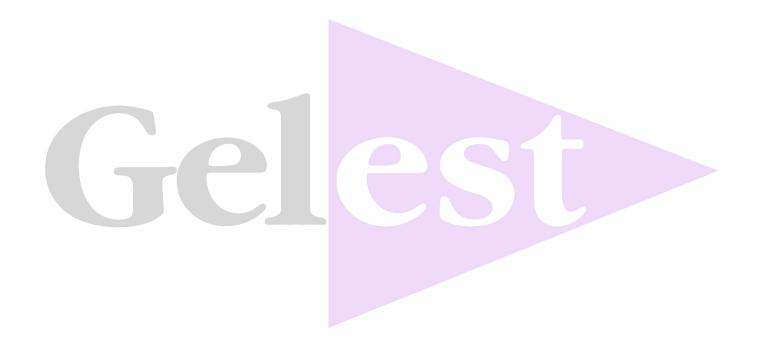
According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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