

1.1. Product identifie

# 6-PHENYLHEXYLDIMETHYLCHLOROSILANE

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878 Issue date: 11/24/2014 Revision date: 4/8/2019 Version: 1.1

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

#### 1.2.1. Relevant identified uses

Use of the substance/mixture

: Chemical intermediate

#### 1.2.2. Uses advised against

No additional information available

## **1.3. Details of the supplier of the safety data sheet**

#### GELEST, INC.

11 East Steel Road Morrisville, PA 19067 **USA** T 215-547-1015 - F 215-547-2484 - (M-F): 8:00 AM - 5:30 PM EST <u>info@gelest.com</u> - <u>www.gelest.com</u>

# **1.4. Emergency telephone number**

Emergency number

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

H314 H318

# **SECTION 2: Hazards identification**

2.1. Classification of the substance or mixture	
Classification according to Regulation (EC) No. 1272/2008 [CLP]	

Skin corrosion/irritation, Category 1, Sub-Category 1B	
Serious eye damage/eye irritation, Category 1	
Full text of H- and EUH-statements: see section 16	

#### Adverse physicochemical, human health and environmental effects

No additional information available

## 2.2. Label elements

Labelling according to Regulation (EC)	No. 1272/2008 [CLP]
Hazard pictograms (CLP)	: GHS05
Signal word (CLP)	: Danger
Hazard statements (CLP)	: H314 - Causes severe skin burns and eye damage.
Precautionary statements (CLP)	<ul> <li>P280 - Wear protective gloves/protective clothing/eye protection/face protection.</li> <li>P260 - Do not breathe vapours.</li> <li>P264 - Wash hands thoroughly after handling.</li> <li>P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing.</li> </ul>

P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

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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 POISON CENTER or doctor.

## 2.3. Other hazards

Contains no PBT and/or vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

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

## 3.1. Substances

Substance type Name CAS-No.	: Mono-constituent : 6-PHENYLHEXYLDIMETHY : 97451-53-1	LCHLOROSII	LANE
Name	Product identifier	%	Classification according to

Name	Product identifier		Classification according to Regulation (EC) No. 1272/2008 [CLP]
6-Phenylhexyldimethylchlorosilane	CAS-No.: 97451-53-1	95 – 100	Skin Corr. 1B, H314 Eye Dam. 1, H318

Full text of H- and EUH-statements: see section 16

### 3.2. Mixtures

#### Not applicable

## SECTION 4: First aid measures

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 person to fresh air and keep comfortable for breathing. Get medical advice/attention.
First-aid measures after skin contact	: Wash with plenty of 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.
4.2. Most important symptoms and ef	fects, both acute and delayed
Symptoms/effects	: Causes severe skin burns and eye damage.
Symptoms/effects after inhalation	: May cause irritation to the respiratory tract. Overexposure may cause: Cough. Headache. Nausea.
Symptoms/effects after skin contact	: Causes (severe) skin burns.
Symptoms/effects after eye contact	: Causes serious eye damage.
Symptoms/effects 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 measu	res	
5.1. Extinguishing media		
Suitable extinguishing media Unsuitable extinguishing media	<ul><li>Water spray. Foam. Carbon dioxide. Dry chemical.</li><li>Water.</li></ul>	
5.2. Special hazards arising from the substance or mixture		
Fire hazard	<ul> <li>Irritating fumes of hydrogen chloride and organic acid vapors may develop when material is exposed to water or open flame.</li> </ul>	

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5.3. Advice for firefighters		
Firefighting instructions Protection during firefighting	<ul> <li>Use water spray to cool exposed surfaces. Exercise caution when fighting any chemical fire.</li> <li>Do not enter fire area without proper protective equipment, including respiratory protection. Avoid all eye and skin contact and do not breathe vapour and mist.</li> </ul>	
SECTION 6: Accidental release mea	asures	
6.1. Personal precautions, protective ed	auipment and emergency procedures	
6.1.1. For non-emergency personnel		
Emergency procedures	: Evacuate unnecessary personnel.	
6.1.2. For emergency responders		
Protective equipment	: Equip cleanup crew with proper protection.	
6.2. Environmental precautions		
Prevent entry to sewers and public waters. Notif	fy authorities if liquid enters sewers or public waters.	
6.3. Methods and material for containm	ent and cleaning up	
Methods for cleaning up	: Clean up any spills as soon as possible, using an absorbent material to collect it. Sweep or shovel spills into appropriate container for disposal.	
6.4. Reference to other sections		
See Section 8. Exposure controls and personal	protection.	
SECTION 7: Handling and storage		
7.1. Precautions for safe handling		
Precautions for safe handling Hygiene measures	<ul> <li>Avoid all eye and skin contact and do not breathe vapour and mist. Provide good ventilation in process area to prevent formation of vapour.</li> <li>Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Wash contaminated clothing before reuse.</li> </ul>	
7.2. Conditions for safe storage, include	ing any incompatibilities	
Storage conditions Incompatible materials Storage area	<ul> <li>Keep container tightly closed.</li> <li>Acids. alcohols. Oxidizing agent.</li> <li>Store in a well-ventilated place. Store away from heat.</li> </ul>	
7.3. Specific end use(s)		
No additional information available		
SECTION 8: Exposure controls/pers	sonal protection	
8.1. Control parameters		
8.1.1 National occupational exposure and biological limit values		
No additional information available		
8.1.2. Recommended monitoring procedures No additional information available		
8.1.3. Air contaminants formed		
No additional information available		
8.1.4. DNEL and PNEC		
No additional information available		
8.1.5. Control banding		
No additional information available		

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### 8.2. Exposure controls

#### 8.2.1. Appropriate engineering controls

#### Appropriate engineering controls:

Provide local exhaust or general room ventilation.

### 8.2.2. Personal protection equipment

#### 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.

#### 8.2.2.1. Eye and face protection

#### Eye protection:

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

#### 8.2.2.2. Skin protection

Skin and body protection: Wear suitable protective clothing

# Hand protection:

Neoprene or nitrile rubber gloves

### 8.2.2.3. Respiratory protection

#### **Respiratory protection:**

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

#### 8.2.2.4. Thermal hazards

No additional information available

#### 8.2.3. Environmental exposure controls

No additional information available

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

### 9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Pale yellow.
Appearance	: Clear liquid.
Molecular mass	: 254.88 g/mol
Odour	: Acrid. Similar to hydrogen chloride.
Odour threshold	: Not available
Melting point	: <0 °C
Freezing point	: Not available
Boiling point	: 132 – 133 °C @ 1.5 mm Hg
Flammability	: Not available
Explosive limits	: Not available
Lower explosion limit	: Not available
Upper explosion limit	: Not available
Flash point	: > 110 °C
Auto-ignition temperature	: Not available
Decomposition temperature	: Not available
рН	: Not available
Viscosity, kinematic	: Not available
Solubility	: Insoluble in water. Reacts with water.
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: < 0.1 mm Hg @ 25°C
Vapour pressure at 50°C	: Not available
Density	: Not available
Relative density	: 0.942
Relative vapour density at 20°C	: >1
Particle characteristics	: Not applicable

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9.2. Other information		
9.2.1. Information with regard to physical hazard classes		
No additional information available		
9.2.2. Other safety characteristics		
Refractive index : 1.4931		
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		
Acids. alcohols. Oxidizing agent.		
10.6. Hazardous decomposition products		
Hydrogen chloride. Organic acid vapors.		
SECTION 11: Toxicological information		
11.1. Information on hazard classes as defined in Regulation (EC) No 1272	2/2008	
Acute toxicity (oral)       : Not classified         Acute toxicity (dermal)       : Not classified		

Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified
Skin corrosion/irritation	: Causes severe skin burns.
Serious eye damage/irritation	: Causes serious eye damage.
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified

# 11.2. Information on other hazards

No additional information available

SECTION 12: Ecological information			
12.1. Toxicity			
Hazardous to the aquatic environment, short-term (acute)	: Not classified		
Hazardous to the aquatic environment, long-term (chronic)	: Not classified		

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12.2. Persistence and de	gradability			
No additional information avai				
12.3. Bioaccumulative po	otential			
No additional information avai	lable			
12.4. Mobility in soil				
No additional information avai	lable			
12.5. Results of PBT and	vPvB assessment			
No additional information avai	lable			
12.6. Endocrine disruption	ng properties			
No additional information avai	lable			
12.7. Other adverse effect	cts			
Other adverse effects	: Thi	s substance may be hazardou	us to the environment.	
SECTION 13: Disposa	I considerations			
13.1. Waste treatment m	ethods			
Product/Packaging disposal re		v be incinerated. Dispose in a	safe manner in accordance v	vith local/national regulations
	Dis	pose of contents/container to	licensed waste disposal facilit	
Ecological information	: Avo	bid release to the environmen	t.	
SECTION 14: Transpo	rt information			
In accordance with ADR / IMD	OG / IATA / ADN / RID			
ADR	IMDG	ΙΑΤΑ	ADN	RID
14.1. UN number or ID n	umber		1	
UN 2987	UN 2987	UN 2987	UN 2987	UN 2987
14.2. UN proper shipping	g name			
CHLOROSILANES, CORROSIVE, N.O.S.	CHLOROSILANES, CORROSIVE, N.O.S.	Chlorosilanes, corrosive, n.o.s.	CHLOROSILANES, CORROSIVE, N.O.S.	CHLOROSILANES, CORROSIVE, N.O.S.
Transport document descri		1.0.0.	0011100112,110.0.	
UN 2987 CHLOROSILANES, CORROSIVE, N.O.S. (6- PHENYLHEXYLDIMETHYL CHLOROSILANE), 8, II, (E)	UN 2987 CHLOROSILANES, CORROSIVE, N.O.S., 8, II	UN 2987 Chlorosilanes, corrosive, n.o.s., 8, II	UN 2987 CHLOROSILANES, CORROSIVE, N.O.S. (6- PHENYLHEXYLDIMETHYL CHLOROSILANE), 8, II	UN 2987 CHLOROSILANES, CORROSIVE, N.O.S. (6- PHENYLHEXYLDIMETHYL CHLOROSILANE), 8, II
14.3. Transport hazard o	lass(es)	1	1	1
8	8	8	8	8
B B	B	8	B	B B
14.4. Packing group				
II	II	II	II	II

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ADR	IMDG	ΙΑΤΑ	ADN	RID
14.5. Environmental haza	ards			
Dangerous for the	Dangerous for the	Dangerous for the	Dangerous for the	Dangerous for the
environment: No	environment: No	environment: No	environment: No	environment: No
	Marine pollutant: No			
No supplementary information	n available		I	1
14.6. Special precautions	for user			
Overland transport				
Classification code (ADR)	: C:	3		
Special provisions (ADR)	: 54	8		
_imited quantities (ADR)	: 0			
Excepted quantities (ADR)	: E0	)		
Packing instructions (ADR)	: P(	010		
Special packing provisions (AD	DR) : RI	<b>ج</b> 7		
Mixed packing provisions (ADF		P15		
Portable tank and bulk contain		4		
Portable tank and bulk contain (ADR)		P2, TP7, TP27		
Tank code (ADR)	: L4	BN		
Vehicle for tank carriage	: A <sup>-</sup>	Г		
Transport category (ADR)	: 2			
Hazard identification number (H	Kemler No.) : X8	30		
Orange plates	:	VOO		
		X80 2987		
Tunnel restriction code (ADR)	: E			
Transport by sea				
Limited quantities (IMDG)	: 0			
Excepted quantities (IMDG)	: E0	)		
Packing instructions (IMDG)	: P(	010		
Tank instructions (IMDG)	: T	4		
Tank special provisions (IMDG	i) : Tf	P2, TP7, TP13, TP27		
EmS-No. (Fire)	: F-	A		
EmS-No. (Spillage)	: S-	В		
Stowage category (IMDG)	: C			
Stowage and handling (IMDG)	: 51	N2		
Properties and observations (II	st	blourless liquids with a pungeni eam, evolving hydrogen chlorid hen involved in a fire, evolve to ost metals. Cause burns to skir	le, an irritating and corrosive goxic gases. In the presence of	gas apparent as white fume moisture, highly corrosive t
Air transport				
PCA Excepted quantities (IATA	A) : E0	)		
PCA Limited quantities (IATA)	,	brbidden		
PCA limited quantity max net q		orbidden		
PCA packing instructions (IATA		orbidden		
PCA max net quantity (IATA)	•	orbidden		
CAO packing instructions (IATA)				
CAO max net quantity (IATA)	: 30			
Special provisions (IATA)	: SC : A'			
ERG code (IATA)	: 81			
Inland waterway transport				
Classification code (ADN)	: C:	3		
Special provisions (ADN)	: 54			
Limited quantities (ADN)	: 0	-		
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Excepted quantities (ADN) Equipment required (ADN) Number of blue cones/lights (ADN)		E0 PP, EP 0
Rail transport		
Classification code (RID)	:	C3
Special provisions (RID)	:	548
Limited quantities (RID)	:	0
Excepted quantities (RID)	:	E0
Packing instructions (RID)	:	P010
Mixed packing provisions (RID)	:	MP15
Portable tank and bulk container instructions (RID)	:	T14
Portable tank and bulk container special provisions	:	TP2, TP7, TP27
(RID)		
Tank codes for RID tanks (RID)	:	L4BN
Transport category (RID)	:	2
Colis express (express parcels) (RID)	:	CE6
Hazard identification number (RID)	:	X80

## 14.7. Maritime transport in bulk according to IMO instruments

#### Not applicable

## **SECTION 15: Regulatory information**

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

#### 15.1.1. EU-Regulations

#### **REACH Annex XVII (Restriction List)**

Not listed on REACH Annex XVII

#### **REACH Annex XIV (Authorisation List)**

Not listed on REACH Annex XIV (Authorisation List)

### **REACH Candidate List (SVHC)**

Not listed on the REACH Candidate List

#### **PIC Regulation (Prior Informed Consent)**

Not listed on the PIC list (Regulation EU 649/2012)

#### **POP Regulation (Persistent Organic Pollutants)**

Not listed on the POP list (Regulation EU 2019/1021)

#### Ozone Regulation (1005/2009)

Not listed on the Ozone Depletion list (Regulation EU 1005/2009)

#### **Explosives Precursors Regulation (2019/1148)**

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

#### **Drug Precursors Regulation (273/2004)**

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

#### 15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No additional information available

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### **SECTION 16: Other information**

## Abbreviations and acronyms:

Abbreviations: ND: Not Determined, No Data; NA: Not Applicable; LD: Lethal Dose; LC: Lethal Concentration; ATE: Acute Toxicity Estimates; H: hour; °: °C 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; APF: Assigned Protection Factor

Other information

: Prepared by safety and environmental affairs.

Full text of H- and EUH-statements:	
Eye Dam. 1         Serious eye damage/eye irritation, Category 1	
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
Skin Corr. 1B	Skin corrosion/irritation, Category 1, Sub-Category 1B

SDS EU (REACH Annex II) - Custom v22

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