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Safety Data Sheet SIT8719.5
Date of issue: 09/22/2015 Version: 1.0

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

# 1.1. Product identifier

Product form : Substance
Physical state : Liquid

Substance name : [TRIS(TRIMETHYLSILOXY)SILYLETHYL]DIMETHYLCHLOROSILANE

Product code : SIT8719.5
Formula : C13H37CIO3Si5

Synonyms : CHLORODIMETHYLSILYLETHYLTRIS(TRIMETHYLSILOXY)SILANE

Chemical family : ORGANOCHLOROSILANE

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

Use of the substance/mixture : Chemical intermediate

For research use only

# 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

info@gelest.com - www.gelest.com

## 1.4. Emergency telephone number

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

# **SECTION 2: Hazards identification**

## 2.1. Classification of the substance or mixture

# Classification (GHS-US)

Skin Corr. 1B H314 Eye Dam. 1 H318

Full text of H-phrases: see section 16

## 2.2. Label elements

## **GHS-US** labeling

Hazard pictograms (GHS-US)



GHS05

Signal word (GHS-US) : Danger

Hazard statements (GHS-US) : H314 - Causes severe skin burns and eye damage

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

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

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

P363 - Wash contaminated clothing before reuse

P405 - Store locked up

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

# 2.3. Other hazards

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

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# SECTION 3: Composition/information on ingredients

#### 3.1. Substance

Substance type : Mono-constituent

Name : [TRIS(TRIMETHYLSILOXY)SILYLETHYL]DIMETHYLCHLOROSILANE

CAS No : 225794-57-0

Name	Product identifier	%	Classification (GHS-US)
[Tris(trimethylsiloxy)silylethyl]dimethylchlorosilane	(CAS No) 225794-57-0	95 -	Skin Corr. 1B, H314
		100	Eye Dam. 1, H318

## 3.2. Mixture

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. IF exposed or concerned: Get medical advice/attention.

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

First-aid measures after ingestion

: 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.

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 Symptoms/injuries after eye contact Causes (severe) skin burns.
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. Water fog. Foam. Carbon dioxide. Dry chemical.

Unsuitable extinguishing media : Water

# 5.2. Special hazards arising from the substance or mixture

Fire hazard

: Irritating fumes of hydrochloric acid and organic acid vapors may develop when material is exposed to water or open flame.

# 5.3. Advice for firefighters

Firefighting instructions

: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any  $\,$ 

chemical fire.

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

# 6.1.1. For non-emergency personnel

Protective equipment
Emergency procedures

: Wear protective equipment as described in Section 8.

: 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.

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# 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. Sweep or

shovel spills into appropriate container for disposal.

## 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

Precautions for safe handling : Avoid all eye and skin contact and do not breathe vapor and mist. Provide good ventilation in

process area to prevent accumulation of vapors.

Hygiene measures : 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.

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

Storage conditions : Keep container tightly closed. Store locked up.

Incompatible materials : Alkalis. Oxidizing agent.

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

#### 7.3. Specific end use(s)

No additional information available

# 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)

respirato

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

# 9.1. Information on basic physical and chemical properties

Physical state: LiquidAppearance: Clear liquid.Molecular mass: 417.32 g/molColor: No data available

Odor : Acrid.

Odor threshold : No data available

Refractive index : 1.4135

pH : No data available

Relative evaporation rate (butyl acetate=1) : < 1

Melting point : No data available

Freezing point : < 0 °C

Boiling point :  $85 \, ^{\circ}\text{C} \, @ \, 0.6 \, \text{mm Hg}$ 

Flash point :  $> 110 \, ^{\circ}\text{C}$ 

Auto-ignition temperature : No data available

Decomposition temperature : No data available

Flammability (solid, gas) : No data available

Vapor pressure : < 0.1 mm Hg @ 25°C

Relative vapor density at 20 °C :>1Relative density :0.9056VOC content :>95%

Solubility : Insoluble in water. Reacts with water.

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Log Pow : No data available
Log Kow : No data available
Viscosity, kinematic : No data available
Viscosity, dynamic : No data available
Explosive properties : No data available
Oxidizing properties : No data available
Explosion limits : No data available

# 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 under 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

Alkalis. Oxidizing agent.

# 10.6. Hazardous decomposition products

Carbon monoxide. Hydrogen chloride. Organic acid vapors. Silicon dioxide.

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

exposure)

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.

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

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Effect on the global warming : No known ecological damage caused by this product.

# **SECTION 13: Disposal considerations**

13.1. Waste treatment methods

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

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

contents/container to licensed waste disposal facility.

Ecology - waste materials : Avoid release to the environment.

## **SECTION 14: Transport information**

14.1. UN number

UN-No.(DOT) : 2987 DOT NA no. UN2987

14.2. UN proper shipping name

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

([TRIS(TRIMETHYLSILOXY)SILYLETHYL]DIMETHYLCHLOROSILANE)

Department of Transportation (DOT) Hazard

Classes

: 8 - Class 8 - Corrosive material 49 CFR 173.136

Hazard labels (DOT) : 8 - Corrosive



Packing group (DOT) : II - Medium Danger

DOT Packaging Exceptions (49 CFR 173.xxx) : None
DOT Packaging Non Bulk (49 CFR 173.xxx) : 206
DOT Packaging Bulk (49 CFR 173.xxx) : 242

14.3. Additional information

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)

DOT Quantity Limitations Cargo aircraft only (49 : 30 L

CFR 175.75)

# **SECTION 15: Regulatory information**

## 15.1. US Federal regulations

# [TRIS(TRIMETHYLSILOXY)SILYLETHYL]DIMETHYLCHLOROSILANE (225794-57-0)

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.

# [Tris(trimethylsiloxy)silylethyl]dimethylchlorosilane (225794-57-0)

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

## 15.2. International regulations

No additional information available

# 15.3. US State regulations

[TRIS(TRIMETHYLSILOXY)SILYLETHYL]DIMETHYLCHLOROSILANE(225794-57-0)		
U.S California - Proposition 65 - Carcinogens List	No	
U.S California - Proposition 65 - Developmental Toxicity	No	
U.S California - Proposition 65 - Reproductive	No	

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[TRIS(TRIMETHYLSILOXY)SILYLETHYL]DIMETHYLCHLOROSILANE(225794-57-0)					
Toxicity - Female					
U.S California - Propo Toxicity - Male	nia - Proposition 65 - Reproductive No				
[Tris(trimethylsiloxy)silylethyl]dimethylchlorosilane (225794-57-0)					
U.S California - Proposition 65 - Carcinogens List	U.S California - Proposition 65 - Developmental Toxicity	U.S California - Proposition 65 - Reproductive Toxicity - Female	U.S California - Proposition 65 - Reproductive Toxicity - Male	No significance risk level (NSRL)	
No	No	No	No		

# **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.

## Full text of H-phrases::

Eye Dam. 1	Serious eye damage/eye irritation Category 1
Skin Corr. 1B	Skin corrosion/irritation Category 1B
H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage

# **HMIS III Rating**

Health

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

given

Flammability Physical : 1 Slight Hazard: 1 Slight Hazard

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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