

Safety Data Sheet SIV9085.0

Issue date: 22/01/2015 Revision date: 13/07/2021 Version: 2.0

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

### 1.1. Product identifier

Product form : Substance
Physical state : Liquid

Substance name : VINYLMETHYLDIETHOXYSILANE

Product code : SIV9085.0 Formula : C7H16O2Si

Synonyms : METHYLVINYLDIETHOXYSILANE; DIETHOXY(METHYL)(VINYL)SILANE

Chemical family : ORGANOETHOXYSILANE

## 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

info@gelest.com - www.gelest.com

## **GELEST INC.**

Fritz-Klatte-Strasse 8 65933 Frankfurt

### Germany

T +49 (0) 69 3535106-500 - F +49 (0) 69 3535106-501 - (M-F): 8:00 AM - 4:00 PM

info@gelestde.com - www.gelestde.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 according to Regulation (EC) No. 1272/2008 [CLP]

Flammable liquids, Category 2 H225 Serious eye damage/eye irritation, Category 2 H319

Full text of H-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) :



GHS02



GHS07

Signal word (CLP) : Dange

Hazard statements (CLP) : H225 - Highly flammable liquid and vapour.

H319 - Causes serious eye irritation.

Precautionary statements (CLP) : P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No

smoking.

Print date: 13/07/2021 EN (English) SDS ID: **SIV9085.0** 1/9

## Safety Data Sheet

P233 - Keep container tightly closed.

P240 - Ground and bond container and receiving equipment.
P241 - Use explosion-proof electrical/ventilating/lighting equipment.
P264 - Wash hands, forearms and face thoroughly after handling.

P280 - Wear protective gloves/protective clothing/eye protection/face protection/hearing

protection.

#### 2.3. Other hazards

Other hazards which do not result in classification

 The hydrolysis product of this compound is ethanol. Overexposure to ethanol by skin absorption, inhalation or ingestion may have a narcotic effect (headache, nausea, drowsiness).

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

### 3.1. Substances

Substance type : Mono-constituent

Name : VINYLMETHYLDIETHOXYSILANE

CAS-No. : 5507-44-8 EC-No. : 226-850-4

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Vinylmethyldiethoxysilane	(CAS-No.) 5507-44-8 (EC-No.) 226-850-4	95 – 100	Flam. Liq. 2, H225 Eye Irrit. 2, H319

Full text of H-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. If you feel unwell, seek medical

advice.

First-aid measures after skin contact : Wash with plenty of water/... Get 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 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 effects, both acute and delayed

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

Symptoms/effects after skin contact : May cause skin irritation.

Symptoms/effects after eye contact : Causes serious eye irritation.

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

Chronic symptoms : On contact with water this compound liberates ethanol which is known to have a chronic effect

on the central nervous system.

### 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 : Do not use straight streams.

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

Fire hazard : Highly flammable liquid and vapour. Irritating fumes and organic acid vapors may develop when

material is exposed to elevated temperatures or open flame.

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

## 5.3. Advice for firefighters

Firefighting instructions : Exercise caution when fighting any chemical fire. Use water spray or fog for cooling exposed

containers.

Print date: 13/07/2021 EN (English) SDS ID: **SIV9085.0** 2/9

## Safety Data Sheet

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 vapour and mist.

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

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

General measures : Eliminate ignition sources. Use special care to avoid static electric charges.

#### 6.1.1. For non-emergency personnel

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

: Evacuate unnecessary personnel. **Emergency procedures** 

#### 6.1.2. For emergency responders

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

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

protection".

## **Environmental precautions**

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

## 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

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

sparking tools.

## Reference to other sections

See Heading 8. Exposure controls and personal protection.

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

### Precautions for safe handling

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

heat, hot surfaces, sparks, open flames and other ignition sources. No smoking

Precautions for safe handling Avoid all eye and skin contact and do not breathe vapour and mist. Provide good ventilation in process area to prevent formation of vapour. Take precautionary measures against static

discharge. Ground/bond container and receiving equipment. 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.

## Conditions for safe storage, including any incompatibilities

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

electrical/ventilating/lighting equipment.

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

Oxidizing agent. Moisture. Water. Incompatible materials

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

## Specific end use(s)

No additional information available

## SECTION 8: Exposure controls/personal protection

## **Control parameters**

No additional information available

## **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. Contact lenses should not be worn

### Skin and body protection:

Print date: 13/07/2021 EN (English) SDS ID: SIV9085.0 3/9

## Safety Data Sheet

Wear suitable protective clothing

### Respiratory protection:

NIOSH-certified organic vapor (black 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 : 160.29 g/mol

Colour : No data available

Odour : characteristic.

Odour threshold : No data available

Refractive index : 1.3998

pH : No data available
Relative evaporation rate (butylacetate=1) : No data available
Melting point : No data available

Freezing point :  $< 0 \, ^{\circ}\text{C}$ Boiling point :  $133 - 134 \, ^{\circ}\text{C}$ Flash point :  $16 \, ^{\circ}\text{C}$ 

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

Flammability (solid, gas) : Highly flammable liquid and vapour.

Vapour pressure : No data available

Relative vapour density at 20 °C : > 1
Relative density : 0.858

Solubility : Insoluble in water. Reacts with water.

Partition coefficient n-octanol/water (Log Pow) : No data available
Partition coefficient n-octanol/water (Log Kow) : No data available
Viscosity, kinematic : No data available
Viscosity, dynamic : No data available
Explosive properties : No data available
Oxidising properties : No data available
Explosive 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.

### 10.3. Possibility of hazardous reactions

On contact with water and moisture liberates ethanol.

## 10.4. Conditions to avoid

Heat. Open flame. Sparks.

## 10.5. Incompatible materials

Oxidizing agent. Moisture. Water.

## 10.6. Hazardous decomposition products

Ethanol. Organic acid vapors. Silicon dioxide.

## **SECTION 11: Toxicological information**

## 11.1. Information on toxicological effects

Acute toxicity : Not classified
Skin corrosion/irritation : Not classified

Serious eye damage/irritation : Causes serious eye irritation.

Print date: 13/07/2021 EN (English) SDS ID: **SIV9085.0** 4/9

## Safety Data Sheet

Respiratory or skin sensitisation : 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 STOT-single exposure : Not classified STOT-repeated exposure : Not classified Aspiration hazard : Not classified

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

Symptoms/effects after skin contact : May cause skin irritation. Symptoms/effects after eye contact : Causes serious eye irritation. Symptoms/effects after ingestion : May be harmful if swallowed.

Chronic symptoms On contact with water this compound liberates ethanol which is known to have a chronic effect

on the central nervous system.

Reason for classification : Expert judgment

## **SECTION 12: Ecological information**

#### **Toxicity**

Hazardous to the aquatic environment, short-

term (acute)

Hazardous to the aquatic environment, long-

term (chronic)

: Not classified

: Not classified

#### Persistence and degradability 12.2.

No additional information available

#### 12.3. **Bioaccumulative potential**

No additional information available

#### 12.4. **Mobility in soil**

No additional information available

#### 12.5. Results of PBT and vPvB assessment

No additional information available

#### Other adverse effects 12.6.

Other adverse effects : May be hazardous to aquatic life if released to open waters.

## **SECTION 13: Disposal considerations**

#### Waste treatment methods 13.1.

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

Product/Packaging disposal recommendations : Incinerate. 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 vapours are flammable.

Ecology - waste materials : Avoid release to the environment.

## **SECTION 14: Transport information**

In accordance with ADR / IMDG / IATA / ADN / RID

#### **UN** number 14.1.

UN-No. (ADR) : 1993 UN-No. (IMDG) : 1993 UN-No. (IATA) : 1993 UN-No. (ADN) : 1993 UN-No. (RID) : 1993

## **UN** proper shipping name

: FLAMMABLE LIQUID, N.O.S. Proper Shipping Name (ADR) : FLAMMABLE LIQUID, N.O.S. Proper Shipping Name (IMDG) Proper Shipping Name (IATA) : Flammable liquid, n.o.s. Proper Shipping Name (ADN) : FLAMMABLE LIQUID, N.O.S.

Print date: 13/07/2021 SDS ID: SIV9085.0 EN (English) 5/9

# Safety Data Sheet

Proper Shipping Name (RID) : FLAMMABLE LIQUID, N.O.S.

: UN 1993 FLAMMABLE LIQUID, N.O.S. (VINYLMETHYLDIETHOXYSILANE), 3, II, (D/E) Transport document description (ADR)

: UN 1993 FLAMMABLE LIQUID, N.O.S. (VINYLMETHYLDIETHOXYSILANE), 3, II Transport document description (IMDG)

Transport document description (IATA) : UN 1993 Flammable liquid, n.o.s. (VINYLMETHYLDIETHOXYSILANE), 3, II

Transport document description (ADN) : UN 1993 FLAMMABLE LIQUID, N.O.S. (VINYLMETHYLDIETHOXYSILANE), 3, II

: UN 1993 FLAMMABLE LIQUID, N.O.S. (VINYLMETHYLDIETHOXYSILANE), 3, II Transport document description (RID)

#### 14.3. Transport hazard class(es)

### ADR

Transport hazard class(es) (ADR) : 3 Danger labels (ADR) : 3



## **IMDG**

: 3 Transport hazard class(es) (IMDG) Danger labels (IMDG) : 3



### IATA

Transport hazard class(es) (IATA)

Danger labels (IATA)



## ADN

Transport hazard class(es) (ADN) : 3 Danger labels (ADN) : 3



## RID

Transport hazard class(es) (RID) : 3 Danger labels (RID) : 3



#### 14.4. **Packing group**

Packing group (ADR) : 11 Packing group (IMDG) : 11 Packing group (IATA) : II

Print date: 13/07/2021 EN (English) SDS ID: SIV9085.0 6/9

## Safety Data Sheet

Packing group (ADN) : 11 : II Packing group (RID)

#### **Environmental hazards** 14.5.

: No Dangerous for the environment Marine pollutant : No

Other information : No supplementary information available

#### 14.6. Special precautions for user

#### - Overland transport

: F1 Classification code (ADR)

Special provisions (ADR) : 274, 601, 640C

Limited quantities (ADR) : 11 Excepted quantities (ADR) : E2 Packing instructions (ADR) : P001 : MP19 Mixed packing provisions (ADR) Portable tank and bulk container instructions : T7

Portable tank and bulk container special : TP1, TP8, TP28

provisions (ADR)

Tank code (ADR) : L1.5BN Vehicle for tank carriage : FL Transport category (ADR) : 2 Special provisions for carriage - Operation : S2, S20

(ADR)

Hazard identification number (Kemler No.) 33

Orange plates

33 1993

D/E

Tunnel restriction code (ADR)

## - Transport by sea

Special provisions (IMDG) : 274 Limited quantities (IMDG) : 1 L Excepted quantities (IMDG) : E2 Packing instructions (IMDG) : P001 IBC packing instructions (IMDG) : IBC02 Tank instructions (IMDG) : T7

Tank special provisions (IMDG) : TP1, TP8, TP28

EmS-No. (Fire) : F-E EmS-No. (Spillage) : S-E Stowage category (IMDG) : B

## - Air transport

PCA Excepted quantities (IATA) : E2 PCA Limited quantities (IATA) : Y341 PCA limited quantity max net quantity (IATA) : 1L PCA packing instructions (IATA) : 353 PCA max net quantity (IATA) : 5L CAO packing instructions (IATA) : 364 CAO max net quantity (IATA) : 60L Special provisions (IATA) : A3 ERG code (IATA) : 3H

## - Inland waterway transport

Classification code (ADN) : F1

: 274, 601, 640C Special provisions (ADN)

Limited quantities (ADN) : 1L Excepted quantities (ADN) : E2

Print date: 13/07/2021 SDS ID: SIV9085.0 7/9 EN (English)

## Safety Data Sheet

Carriage permitted (ADN) : T

Equipment required (ADN) : PP, EX, A Ventilation (ADN) : VE01 Number of blue cones/lights (ADN) : 1

- Rail transport

Classification code (RID) : F1

Special provisions (RID) : 274, 601, 640C

Limited quantities (RID) : 1L Excepted quantities (RID) : E2 Packing instructions (RID) : P001 : MP19 Mixed packing provisions (RID) : T7

Portable tank and bulk container instructions

(RID)

Portable tank and bulk container special

provisions (RID)

: TP1, TP8, TP28

Tank codes for RID tanks (RID) : L1.5BN : 2 Transport category (RID) Colis express (express parcels) (RID) : CE7 Hazard identification number (RID) : 33

## Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

## **SECTION 15: Regulatory information**

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

#### 15.1.1. **EU-Regulations**

No REACH Annex XVII restrictions

VINYLMETHYLDIETHOXYSILANE is not on the REACH Candidate List

VINYLMETHYLDIETHOXYSILANE is not on the REACH Annex XIV List

VINYLMETHYLDIETHOXYSILANE is not subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 july 2012 concerning the export and import of hazardous chemicals.

VINYLMETHYLDIETHOXYSILANE is not subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

#### 15.1.2. **National regulations**

Germany

: Not classified according to Regulation Governing Systems for Handling Substances Hazardous Regulatory reference

to Waters (AwSV)

Hazardous Incident Ordinance (12. BlmSchV) : Is not subject of the 12. BlmSchV (Hazardous Incident Ordinance)

Netherlands

SZW-lijst van kankerverwekkende stoffen : The substance is not listed SZW-lijst van mutagene stoffen : The substance is not listed SZW-lijst van reprotoxische stoffen -: The substance is not listed

Borstvoeding

SZW-lijst van reprotoxische stoffen -: The substance is not listed

Vruchtbaarheid

SZW-lijst van reprotoxische stoffen -: The substance is not listed

Ontwikkeling

**Denmark** 

Class for fire hazard : Class I-1 Store unit 1 liter

Classification remarks F <Flam. Liq. 2>; Emergency management guidelines for the storage of flammable liquids must

be followed

## **Chemical safety assessment**

No chemical safety assessment has been carried out

## **SECTION 16: Other information**

Print date: 13/07/2021 SDS ID: SIV9085.0 EN (English) 8/9

# Safety Data Sheet

### 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 Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 2	Flammable liquids, Category 2
H225	Highly flammable liquid and vapour.
H319	Causes serious eye irritation.

## SDS EU (REACH Annex II) - Custom

The information contained in this document has been gathered from reference materials and/or Gelest, Inc. test data and is to the best knowledge and belief of Gelest, Inc. accurate and reliable. Such information is offered solely for your consideration, investigation and verification. It is not suggested or guaranteed that the hazard precautions or procedures described are the only ones which exist. Gelest, Inc. makes no warranties, express or implied, with respect to the use of such information and assumes no responsibility therefore. Information on this safety data sheet is not intended to constitute a basis for product specifications.

© 2020 Gelest Inc. Morrisville, PA 19067



Print date: 13/07/2021 EN (English) SDS ID: **SIV9085.0** 9/9