

GELEST, INC.

11 East Steel Rd. Morrisville, PA 19067
Phone: (215) 547-1015

MATERIAL SAFETY
DATA SHEET

EMERGENCY TELEPHONE
CHEMTREC: 1-800-424-9300

NAME USED ON LABEL: **VINYLSILANE - SIV9096.7**

CHEMICAL NAME: VINYLSILANE

SYNONYMS: 3-SILAPROPENE;

CHEMICAL FAMILY: ORGANOSILANE

FORMULA: C_2H_6Si

HMIS CODES HEALTH: 3 FLAMMABILITY: 4 REACTIVITY: 2

INGREDIENTS

IDENTITY	CAS NO.	%	TLV
----------	---------	---	-----

VINYLSILANE	7291-09-0	>97	not established (ACGIH TLV for silane: 5ppm TWA)
-------------	-----------	-----	---

PHYSICAL DATA

Boiling Point: -22.8°C

Freezing Point: -171 to -179°C

Specific Gravity: 0.67 at -23°C

Vapor Pressure, 21°C: >1 atm

Vapor Density (air = 1): 1.6

Solubility in water: reacts

% volatiles: 100

Evaporation rate (butyl acetate = 1): >1

Molecular Weight: 58.16

Other: NA

Appearance & Color: Colorless gas

FIRE & EXPLOSION DATA

Vinylsilane may spontaneously ignite on contact with air.

Flash Point, COC : <-40°C (-40°F) Autoignition Temp.: not determined

Flammability Limits: not determined

Extinguishing Media: Alcohol resistant foam, carbon dioxide, dry chemical. Use of high expansion foam (100:1) is recommended to cover flames.

Special Fire Fighting Procedures: Use only dry media to extinguish flames. Avoid eye and skin contact. Do not breathe fumes or inhale vapors.

Unusual Fire and Explosion Hazards: Irritating fumes and organic acid vapors may develop when material is exposed to water or open flame.

-1-(SIV9096.7)

Abbreviations: ND: Not Determined, No Data; NA: Not Applicable; LD: Lethal Dose, LC: Lethal Concentration; H: hour; °: °C unless otherwise stated; mm: millimeters Hg, torr; PEL: permissible exposure level; TWA: time weighted average; TLV: threshold limit value; HMIS: Hazardous Material Information System; CAS No.: Chemical Abstract Service Registration Number
Gelest, Inc. © 2008

ENVIRONMENTAL INFORMATION

Spill response: Evacuate area. The potential exists for spontaneous ignition and explosion. Allow vapors to disperse. Ventilate area.

Recommended Disposal: Incinerate. Follow all chemical pollution control regulations.

HEALTH HAZARD DATA

Eye Contact: May cause immediate or delayed chemical burns, including conjunctivitis and corneal damage.

Skin contact: May produce irritation or contact dermatitis.

Inhalation: Inhalation of vapors will irritate the respiratory tract. Overexposure may produce severe tissue damage.

Inhalation not determined

Oral Toxicity: not determined

Chronic Toxicity: There are no known chronic effects related to this compound.

SUGGESTED FIRST AID

EYES: In case of contact, immediately flush eyes with flowing water for at least 15 minutes. Get medical attention.

SKIN: Wash with soap and water.

INHALATION: Move exposed individual to fresh air. Call a physician.

INGESTION: Never give fluids or induce vomiting if patient is unconscious or having convulsions. Get medical attention.

REACTIVITY DATA

Stability: Stable in sealed cylinders stored under a dry inert atmosphere.

Conditions to avoid: Avoid contact with heat, sparks or open flame.

Incompatibility (materials to avoid): Reacts with oxygen in air, may ignite spontaneously. Mixtures with mercury may explode when shaken in the presence of air. Platinum, platinum and iron salts and other Lewis acids can cause a polymerization reaction or generation of flammable hydrogen gas in the presence of moisture. Avoid contact with alcohols, acids, oxidizers.

Hazardous Polymerization: May occur, especially if heated with platinum or peroxides.

Hazardous decomposition products: Organic acid vapors, silicon dioxide.

-2-(SIV9096.7)

Abbreviations: ND: Not Determined, No Data; NA: Not Applicable; LD: Lethal Dose, LC: Lethal Concentration; H: hour; °: °C unless otherwise stated; mm: millimeters Hg, torr; PEL: permissible exposure level; TWA: time weighted average; TLV: threshold limit value; HMIS: Hazardous Material Information System; CAS No.: Chemical Abstract Service Registration Number
Gelest, Inc. © 2008

SPECIAL PROTECTION INFORMATION

Ventilation: Local exhaust is required. Mechanical is recommended.

Respiratory Protection: If exposure exceeds TLV air-supplied or NIOSH approved combination organic vapor/acid gas respirator.

Eye and Face Protection: Chemical worker's goggles. Do not wear contact lenses.

Other Clothing and Equipment: Rubber, neoprene or nitrile gloves. An eyewash and emergency shower should be available.

OTHER PRECAUTIONS

For research use only.

Storage and Handling: Store in sealed cylinders in isolated area below 30°C.

Containers and transfer lines require grounding during use.

TRANSPORTATION

DOT SHIPPING NAME: LIQUIFIED GAS, FLAMMABLE, N.O.S. (VINYLSILANE)

DOT HAZARD CLASS: 2

DOT LABEL: Flammable Gas

DOT ID No: UN3161

Prepared by safety and environmental affairs MSDS ISSUE DATE SIV9096.7: 7/17/12
SUPERSEDES: none

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.

-3-(SIV9096.7)

© 2012 Gelest Inc. Morrisville, PA 19067