



Safety Data Sheet

acc. to OSHA HCS

Printing date 03/06/2021

Version 4

Reviewed on 01/21/2021

1 Identification

1.1 Product identifier

Product name : Vinyltriisopropenoxysilane
Product number : 370484
CAS-No. : 15332-99-7

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

Identified uses : Laboratory chemicals, Manufacture of substances

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier: J&K Scientific LLC
601 Interchange Blvd, Newark, DE 19711
Telephone/Fax: +1 952 942 3333 / +1 952 942 3322
E-mail address: jkus@jk-sci.com
J&K Scientific Ltd.
AEF 18/F Bldg-D Majesty Garden 6 Bei-Si-Huan-Zhong Rd. Beijing
Telephone/Fax: +86 10 8284 8833 / +86 10 8284 9933
E-mail address: jkinfo@jkchemical.com

Preparation Information: Product safety department

Emergency telephone number: +1 800 424 9300 (for USA & Canada)

2 Hazard(s) identification

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)



GHS02 Flame

Flam. Liq. 3 H226 Flammable liquid and vapor.



GHS06 Skull and crossbones

Acute Tox. 1 H330 Fatal if inhaled.



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2A H319 Causes serious eye irritation.

STOT SE 3 H335 May cause respiratory irritation.

2.2 Label elements

GHS label elements

The substance is classified and labeled according to the Globally Harmonized System (GHS).

Hazard pictograms



GHS02

GHS06

GHS07

Signal word

Danger

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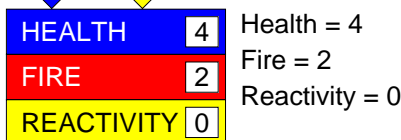
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Product name : Vinyltriisopropenoxysilane

Hazard statements	Flammable liquid and vapor. Fatal if inhaled. Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation.
Precautionary statements	Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Wear protective gloves/protective clothing/eye protection/face protection. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Classification system**NFPA ratings (scale 0 - 4)****HMIS-ratings (scale 0 - 4)****2.3 Other hazards****Results of PBT and vPvB assessment**

PBT:	Not applicable.
vPvB:	Not applicable.

3 Composition/information on ingredients

Chemical characterization: Substances

MF:	C ₁₁ H ₁₈ O ₃ Si
MW:	226.35 g/mol
CAS-No. Description	15332-99-7 Vinyltriisopropenoxysilane

4 First-aid measures

4.1 Description of first aid measures

General information:	Consult a physician. Show this safety data sheet to the doctor in attendance.
After inhalation:	If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
After skin contact:	Wash off with soap and plenty of water. Consult a physician.
After eye contact:	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
After swallowing:	Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Information for doctor**Most important symptoms and effects, both acute and delayed**

No further information available

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.
no data available

Indication of any immediate medical attention and special treatment needed

No data available

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5 Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing agents: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture

Carbon oxide, silicon oxide

5.3 Advice for firefighters Wear self contained breathing apparatus for fire fighting if necessary.

6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Avoid breathing dust. Remove persons from danger area.

Environmental precautions: Do not allow to enter sewers/ surface or ground water.

6.2 Methods and material for containment and cleaning up

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

6.3 Reference to other sections

See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

Protective Action Criteria for Chemicals

PAC-1: Substance is not listed.

PAC-2: Substance is not listed.

PAC-3: Substance is not listed.

7 Handling and storage

7.1 Handling

Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.
Open and handle receptacle with care.

Information about protection against explosions and fires

Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
Keep respiratory protective device available.

7.2 Storage

Conditions for safe storage, including any incompatibilities

Store in a cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Storage Class (TRGS510):

LGK 3: Flammable liquids

7.3 Specific end uses

no data available

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8 Exposure controls/personal protection

8.1 Control parameters

Components with limit values
that require monitoring at the
workplace

Not required.

Additional information:

The lists that were valid during the creation were used as basis.

Exposure controls

8.2 Personal protective equipment

General protective and hygienic
measures:

Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
Store protective clothing separately.
Avoid contact with the eyes and skin.

Breathing equipment:

In case of brief exposure or low pollution use respiratory filter device. In
case of intensive or longer exposure use respiratory protective device that
is independent of circulating air.

Protection of hands:



Protective gloves

Selection of the glove material on consideration of the
penetration times, rates of diffusion and the degradation

Material of gloves :

The selection of the suitable gloves does not only depend on the material,
but also on further marks of quality and varies from manufacturer to
manufacturer.

Penetration time of glove material

The exact break through time has to be found out by the manufacturer of
the protective gloves and has to be observed.

Eye protection:



Tightly sealed goggles

Body protection:

Complete suit protecting against chemicals, The type of protective
equipment must be selected according to the concentration and amount of
the dangerous substance at the specific workplace.

9 Physical and chemical properties

Information on basic physical and chemical properties

General Information

Appearance

Form:	Liquid
Color:	Colorless
Odor:	No data available
Odor threshold:	Not determined.
pH-value:	Not determined.

Change in condition

Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	73-75 °C (163.4-167 °F)

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Product name : Vinyltriisopropenoxysilane

Flash point:	≤60 °C (≤140 °F)
Flammability (solid, gaseous):	Not applicable.
Decomposition temperature:	Not determined.
Auto igniting:	Not determined.
Danger of explosion:	Not determined.
Explosion limits	
Lower:	Not determined.
Upper:	Not determined.
Vapor pressure:	Not determined.
Density at 20 °C (68 °F):	0.926 g/cm ³ (7.72747 lbs/gal)
Bulk density:	Not determined
Relative density	Not determined.
Vapor density	Not determined.
Evaporation rate	Not determined.
Solubility in / Miscibility with	
Water:	Not determined.
Partition coefficient (n-octanol/water):	Not determined.
Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
Other information	no data available

10 Stability and reactivity

10.1 Reactivity	No data available
10.2 Chemical stability	Stable under recommended storage conditions.
10.3 Possibility of hazardous reactions	No dangerous reactions known.
10.4 Conditions to avoid	No data available
10.5 Incompatible materials	No data available
10.6 Hazardous decomposition products	No dangerous decomposition products known.

11 Toxicological information

11.1 Information on toxicological effects

Primary irritant effect	
on the skin:	Irritant to skin and mucous membranes.
on the eye:	Irritating effect.
Sensitization:	No sensitizing effects known.
Subacute to chronic toxicity:	
Carcinogenic categories	
IARC (International Agency for Research on Cancer)	Substance is not listed.
NTP (National Toxicology Program)	Substance is not listed.
OSHA-Ca (Occupational Safety & Health Administration)	Substance is not listed.

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12 Ecological information

12.1 Toxicity

Aquatic toxicity No data available

12.2 Persistence and

degradability No data available

12.3 Behavior in environmental systems

Bioaccumulative potential : No data available

Mobility in soil : No data available

12.4 Additional ecological information

General notes: Water hazard class 1 (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
no data available

12.5 Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

12.6 Other adverse effects : No data available

13 Disposal considerations

13.1 Product Offer surplus and non-recyclable solutions to a licensed disposal company.
Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

13.2 Contaminated packaging Dispose of as unused product.

13.3 Recommendation Disposal must be made according to official regulations.

14 Transport information

14.1 UN-Number

DOT, ADR, IMDG, IATA UN1993

14.2 UN proper shipping name

DOT Flammable liquids, n.o.s. (Vinyltriisopropenoxysilane)

ADR 1993 FLAMMABLE LIQUID, N.O.S.

(Vinyltriisopropenoxysilane)

IMDG, IATA FLAMMABLE LIQUID, N.O.S. (Vinyltriisopropenoxysilane)

14.3 Transport hazard class(es)

DOT



Class

3 Flammable liquids

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Label

3

ADR, IMDG, IATA



Class

3 Flammable liquids

Label

3

14.4 Packing group

DOT, ADR, IMDG, IATA

III

14.5 Environmental hazards:**Marine pollutant:**

No

Special precautions for user

Warning: Flammable liquids

Hazard identification number (Kemler code):

33

EMS Number:

F-E, S-E

Stowage Category

A

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable.

14.6 Transport/Additional information:

Not dangerous according to the above specifications.

DOT**Quantity limitations**

On passenger aircraft/rail: 60 L

On cargo aircraft only: 220 L

ADR**Excepted quantities (EQ)**

Code: E1

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 1000 ml

IMDG**Limited quantities (LQ)**

5L

Excepted quantities (EQ)

Code: E1

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 1000 ml

UN "Model Regulation":

UN 1993 FLAMMABLE LIQUID, N.O.S.

(VINYLTRIISOPROPENOXYSILANE), 3, III

15 Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**Sara****Section 355 (extremely hazardous substances):**

Substance is not listed.

Section 313 (Specific toxic chemical listings):

Substance is not listed.

TSCA (Toxic Substances**Control Act):**

: ACTIVE

Hazardous Air Pollutants

Substance is not listed.

Proposition 65**Chemicals known to cause cancer:** Substance is not listed.

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Product name : Vinyltriisopropenoxysilane**Chemicals known to cause reproductive toxicity for females:**

Substance is not listed.

Chemicals known to cause reproductive toxicity for males:

Substance is not listed.

Chemicals known to cause developmental toxicity:

Substance is not listed.

Carcinogenic categories**EPA (Environmental Protection Agency)**

Substance is not listed.

TLV (Threshold Limit Value established by ACGIH)

Substance is not listed.

NIOSH-Ca (National Institute for Occupational Safety and Health)

Substance is not listed.

GHS label elements

The substance is classified and labeled according to the Globally Harmonized System (GHS).

Hazard pictograms

GHS02

GHS06

GHS07

Signal word

Danger

Hazard statements

Flammable liquid and vapor.

Fatal if inhaled.

Causes skin irritation.

Causes serious eye irritation.

May cause respiratory irritation.

Precautionary statements

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

Wear protective gloves/protective clothing/eye protection/face protection.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

15.2 Chemical safety**assessment:**

A Chemical Safety Assessment has not been carried out.

16 Other information

The above information is believed to be correct but does not represent any guarantee of the properties of the product. Some new information or amendments may be added afterwards. Prior to use, please investigate not only the hazards and toxicity information but also the laws and regulations of the organization, area and country where the products are to be used, which shall be given the first priority. The products are supposed to be used promptly after purchase in consideration of safety. All chemical products should be treated with the recognition of "having unknown hazards and toxicity", which differ greatly depending on the conditions and handling when in use and/or the conditions and duration of storage. The products must be handled only by those who are familiar with specialized knowledge and have experience or under the guidance of those specialists throughout use from opening to storage and disposal. Safe usage conditions shall be set up on each user's own responsibility. Any use of the product not in conformance with this Material Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

Abbreviations and acronyms:

ADR: Accord relatif au transport international des marchandises dangereuses par route
(European Agreement Concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association

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ACGIH: American Conference of Governmental Industrial Hygienists
CAS: Chemical Abstracts Service (division of the American Chemical Society)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
NIOSH: National Institute for Occupational Safety
OSHA: Occupational Safety & Health
TLV: Threshold Limit Value
PEL: Permissible Exposure Limit
REL: Recommended Exposure Limit
Flam. Liq. 3: Flammable liquids – Category 3
Acute Tox. 1: Acute toxicity – Category 1
Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3