

Date of issue: 23/03/2018

Safety Data Sheet

 Identification of the substance/mixture and of the company/undertaking Product identifier: Product name: Triethylsilane Product code(SDS NO): 9255E-1 Details of the supplier of the safety data sheet Manufacturer/Supplier: KISHIDA CHEMICAL CO., LTD. Address: 3-1, Honmachibashi, Chuo-ku,Osaka 540-0029,JAPAN Division: Safety Management Dept. of Chemicals Telephone number: +81-6-6946-8061 FAX: +81-6-6946-1607 e-mail address: kagakuhinanzenkanri@kishida.co.jp

2. Hazards identification
GHS classification and label elements of the product
Classification of the substance or mixture
Physiacal and chemical hazards
Flammable liquids: Category 2
HEALTH HAZARDS
Skin corrosion/irritation: Category 2
Serious eye damage/eye irritation: Category 2A
(Note) GHS classification without description: Not applicable/Out of classification/Not classifiable
Label elements

Signal word: Danger
HAZARD STATEMENT

Highly flammable liquid and vapor

Causes skin irritation Causes serious eye irritation PRECAUTIONARY STATEMENT Prevention Keep away from heat/sparks/open flames/hot surfaces. – No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools.

Take precautionary measures against static discharge.

Wash contaminated parts thoroughly after handling.

Wear protective gloves and face protection.

Wear eye protection/face protection.

Response

In case of fire: Use appropriate media other than water for extinction.

IF ON SKIN: Wash with plenty of soap and water.

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



If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. Storage Store in a well-ventilated place. Keep cool. Disposal Dispose of contents/container in accordance with local/national regulation. Physical and Chemical hazards

Highly flammable liquid. Vapor/air mixture may explode.

3. Composition/information on ingredients

Mixture/Substance selection: Substance Ingredient name:Triethylsilane Content(%):98(min) Chemical formula:(C2H5)3SiH CAS No.:617-86-7 MW:116.28 ECNO:210-535-3 Note : The figures shown above are not the specifications of the product.

4. First-aid measures

Descriptions of first-aid measures

IF INHALED

Remove person to fresh air and keep comfortable for breathing.

Call a POISON CENTER or doctor/physician if you feel unwell.

IF ON SKIN (or hair)

Take off immediately all contaminated clothing. Rinse skin with water/shower.

Wash with plenty of soap and water.

If skin irritation or rash occurs: Get medical advice/attention.

IF IN EYES

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

If eye irritation persists: Get medical advice/attention.

IF SWALLOWED

Rinse mouth.

Call a POISON CENTER or doctor/physician if you feel unwell.

5. Fire-fighting measures
Extinguishing media
Suitable extinguishing media
In case of fire, use foam, dry powder, CO2, dry sand.
Specific hazards arising from the substance or mixture
Containers may explode when heated.
Fire may produce irritating, corrosive and/or toxic gases.
Advice for firefighters
Specific fire-fighting measures
Evacuate non-essential personnel to safe area.
Special protective equipment and precautions for fire-fighters



Wear fire/flame resistant/retardant clothing. Wear protective gloves/protective clothing/eye protection/face protection. Firefighters should wear self-contained breathing apparatus with full face peace operated positive pressure mode.

6. Accidental release measures

Personnel precautions, protective equipment and emergency procedures
 Ventilate area after material pick up is complete.
 Wear proper protective equipment.
 Methods and materials for containment and cleaning up
 Absorb spill with inert material (dry sand, earth, et al), then place in a chemical waste container.

Preventive measures for secondary accident Collect spillage.

7. Handling and storage

Precautions for safe handling
Preventive measures
(Protective measures against fire and explosion)
Keep away from heat/sparks/open flames/hot surfaces. – No smoking.
Ground/bond container and receiving equipment.
Use explosion-proof electrical/ventilating/lighting equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Exhaust/ventilator
Exhaust/ventilator should be available.
Safety treatments
Avoid contact with skin.
Avoid contact with eyes.
Safety Measures/Incompatibility
Wear protective gloves, protective clothing or face protection.
Wear eye protection/face protection.
When using do not eat, drink or smoke.
Conditions for safe storage, including any incompatibilities
Recommendation for storage
Keep container tightly closed.
Store in a cool, dry place. Do not store in direct sunlight.

8. Exposure controls/personal protection

Exposure controls Appropriate engineering controls Do not use in areas without adequate ventilation. Eye wash station should be available. Washing facilities should be available. Individual protection measures Respiratory protection Wear respiratory protection. Hand protection Wear protective gloves. Eye protection Wear eye/face protection.



Safety and Health measures Wash … thoroughly after handling. Take off contaminated clothing and wash it before reuse.

9. Physical and Chemical Properties Information on basic physical and chemical properties Physical properties Appearance: Liquid Color: Colorless Odor data N.A. Phase change temperature Initial Boiling Point/Boiling point: 108°C Melting point/Freezing point data N.A. Decomposition temperature data N.A. Flash point: (Triethylsilane)-3°C Auto-ignition temperature: 250°C Explosive properties data N.A. Vapor pressure data N.A. Vapor density data N.A. Specific gravity/Density: 0.73 Solubility Solubility in water: Insoluble n-Octanol /water partition coefficient data N.A.

10. Stability and Reactivity

Chemical stability
Stable under normal storage/handling conditions.

Conditions to avoid

Contact with incompatible materials.
Contact with fire source.

Incompatible materials

Acids, Bases, Oxidizing agents, Water, Metals
Hazardous decomposition products
Carbon oxides, Silicon oxide

11. Toxicological Information
Information on toxicological effects
No Acute toxicity data available
No Irritant properties data available
No Allergenic and sensitizing effects data available
No Mutagenic effects data available
No Carcinogenic effects data available
No Teratogenic effects data available
No reproductive toxicity data available
No STOT-single/repeated exposure data available
No Aspiration hazard data available



12. Ecological Information
Ecotoxicity
No Aquatic toxicity data available
No Persistence and degradability data available
No Bioaccumulative potential data available
No Mobility in soil data available
Ozone depleting chemical data not available

13. Disposal considerations Waste treatment methods

Dispose of contents/container in accordance with local/national regulation.

14. Transport Information UN number: 1993 UN proper shipping name: FLAMMABLE LIQUID, N.O.S. Transport hazard class(es): 3 Packing group: II ERG GUIDE NO.: 128 Special provisions NO.: 274; A3

15. Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture US major regulations TSCA Triethylsilane Other regulatory information Ensure this material in compliance with federal requirements and ensure conformity to local regulations.

16. Other information

GHS classification and labelling

Flam. Liq. 2: H225 Highly flammable liquid and vapor

Skin Irrit. 2: H315 Causes skin irritation

Eye Irrit. 2A: H319 Causes serious eye irritation

Reference Book

Globally Harmonized System of classification and labelling of chemicals, (5th ed., 2013), UN Recommendations on the TRANSPORT OF DANGEROUS GOODS 19th edit., 2015 UN Classification, labelling and packaging of substances and mixtures (table3-1 ECNO6182012) 2016 EMERGENCY RESPONSE GUIDEBOOK (US DOT) 2017 TLVs and BEIs. (ACGIH) http://monographs.iarc.fr/ENG/Classification/index.php Supplier's data/information Hazard Communication Standard - 2012

General Disclaimer

This information contained in this data sheet represents the best information currently available to us. However, no warranty is made with respect to its completeness and we assume no liability resulting from its use. It are advised to make their own tests to determinate the safety and suitability of each such product or combination for their own



purposes.

The data given here is based on current knowledge and experience. The purpose of this Safety Data Sheet is to describe the products in terms of their safety requirements. The data does not signify any warranty with regard to the products' properties.

The GHS classification data given here is based on current Japan official data (NITE published in 2016).