



Safety Data Sheet

1. Identification of the substance/mixture and of the company/undertaking

Product identifier:

Product name: tert-Butyldimethylchlorosilane

Product code(SDS NO): 1211E-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

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2. Hazards identification

GHS classification and label elements of the product

Classification of the substance or mixture

Physiocal and chemical hazards

Flammable solids: Category 1

HEALTH HAZARDS

Skin corrosion/irritation: Category 1A

Serious eye damage/eye irritation: Category 1

(Note) GHS classification without description: Not applicable/Out of classification/Not classifiable

Label elements



Signal word: Danger

HAZARD STATEMENT

Flammable solid

Causes severe skin burns and eye damage

Causes serious eye damage

PRECAUTIONARY STATEMENT

Prevention

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

Ground/bond container and receiving equipment.

Use explosion-proof electrical/ventilating/lighting equipment.

Do not breathe dust/fume/gas/mist/vapors/spray.

Wash contaminated parts thoroughly after handling.

Wear protective gloves, protective clothing or face protection.

Wear eye protection/face protection.

Response

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

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

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

Wash contaminated clothing before reuse.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if



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present and easy to do. Continue rinsing.

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

Disposal

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

Physical and Chemical hazards

Flammable solid. Vapor/air mixture may explode.

3. Composition/information on ingredients

Mixture/Substance selection:

Substance

Ingredient name: tert-Butyldimethylchlorosilane

Content(%): 95(min)

Chemical formula: C₆H₁₅ClSi

Chemicals No, Japan: 2-2041

CAS No.: 18162-48-6

MW: 150.72

ECNO: 242-042-4

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.

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. Do NOT induce vomiting.

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

5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media

Use appropriate extinguishing media suitable for surrounding facilities.

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 piece 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

Sweep up, place in a bag and hold for waste disposal.

Preventive measures for secondary accident

Collect spillage.

7. Handling and storage

Precautions for safe handling

Preventive measures

(Exposure Control for handling personnel)

Do not breathe dust/fume/gas/mist/vapors/spray.

(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.

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.

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.

Wash contaminated clothing before reuse.



9. Physical and Chemical Properties

Information on basic physical and chemical properties

Physical properties

Appearance: Crystalline powder

Color: White

Odor: Pungent odor

Phase change temperature

Initial Boiling Point/Boiling point: 125°C (257°F)

Melting point/Freezing point: 90°C (194°F)

Decomposition temperature data N.A.

Flash point: (tert-Butyldimethylchlorosilane)(C.C.) 28°C (82.4°F)

Auto-ignition temperature data N.A.

Explosive properties data N.A.

Vapor pressure: 1.9 kPa (20°C)

Vapor density data N.A.

Relative Vapor Density (Air=1): 5.2

Specific gravity/Density: 1.23 (25°C)

Solubility

Solubility in water: Insoluble (hydrolysis)

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

Bases, Strong oxidizing agents, Water, Alcohol

Hazardous decomposition products

Carbon oxides, Hydrogen chloride, Silicon dioxide

11. Toxicological Information

Information on toxicological effects

Acute toxicity

Acute toxicity (Dermal)

[Company proprietary data]

(tert-Butyldimethylchlorosilane)

mouse LD50=1449 mg/kg

Acute toxicity (Inhalation)

[Company proprietary data]

(tert-Butyldimethylchlorosilane)

mouse LC50=1108 ppm/1hr

rat LC50=3124 ppm/1hr

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



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No Aspiration hazard data available

Additional data

May cause lung disorders by massive inhalation of powdered substance.

-e.g. fibrosis of lung tissue, cough, sputum, breath shortness, dyspnea, decline of lung function, interstitial lung disease, pneumothorax

12. Ecological Information

Ecotoxicity

Aquatic toxicity

Aquatic acute toxicity component(s) data

[Company proprietary data]

(tert-Butyldimethylchlorosilane)

Fish(*Gambusia affinis*) LC50=282mg/L/96hr

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: 2925

UN proper shipping name:

FLAMMABLE SOLID, CORROSIVE, ORGANIC, N.O.S.

Transport hazard class(es): 4.1

Transport subsidiary risks: 8

Packing group: II

ERG GUIDE NO.: 134

Special provisions NO.: 274; A3; A803

15. Regulatory Information

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

US major regulations

TSCA

tert-Butyldimethylchlorosilane

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. Sol. 1: H228 Flammable solid

Skin Corr. 1A: H314 Causes severe skin burns and eye damage

Eye Dam. 1: H318 Causes serious eye damage

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



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Classification, labelling and packaging of substances and mixtures (table 3-1 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 is advised to make their own tests to determine 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).