

# SAFETY DATA SHEET

Date Printed: 05/16/2024 Date Revised: 01/15/2022

## **SECTION 1. IDENTIFICATION**

Product Identifier: (4N) 99.99% Tris(dimethylamino)silane

Product Code: SI-OMX-04

**CAS Number:** 15112-89-7

Relevant identified uses of the substance: Scientific research and development

Supplier details:

**American Elements** 10884 Weyburn Ave. Los Angeles, CA 90024 Tel: +1 310-208-0551

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Emergency telephone number:

+1 800-424-9300

## **SECTION 2. HAZARDS IDENTIFICATION**

Classification of the substance or mixture

~?GHS02 Flame

Flam. Liq. 3 H226 Flammable liquid and vapor.

Water-react. 2 H261 In contact with water releases flammable gas.

~?GHS06 Skull and crossbones

Acute Tox. 3 H301 Toxic if swallowed.

Acute Tox. 3 H311 Toxic in contact with skin.

~?GHS05 Corrosion

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

Eye Dam. 1 H318 Causes serious eye damage.

~?GHS07

Acute Tox. 4 H332 Harmful if inhaled.

GHS label elements

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









GHS02 GHS05 GHS06 Signal word Danger

Hazard-determining components of labeling: Tris(dimethylamino)silane, 99+% Hazard statements H226 Flammable liquid and vapor. H261 In contact with water releases flammable gas. H301+H311 Toxic if swallowed or in contact with skin. H332 Harmful if inhaled. H314 Causes severe skin burns and eye damage. Precautionary statements P101 If medical advice is needed, have product container or label at hand. P102 Keep out of reach of children. P103 Read label before use. P231+P232 Handle under inert gas. Protect from moisture. P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact present and easy to do. Continue rinsing. P403+P233 Store in a well-ventilated place. Keep container tightly closed. P422 Store contents under inert gas. P501 Dispose of contents/container in accordance with local/regional/national/international regulations. Classification system: NFPA ratings (scale 0 - 4) 3 0 2 W— Health = 3Fire = 0Reactivity = 2 The substance demonstrates unusual reactivity with water. HMIS-ratings (scale 0 - 4) HEALTH **FIRE** 

**REACTIVITY** 

3

0

Health = 3

Fire = 0

Reactivity = 2

Other hazards

Results of PBT and vPvB assessment

PBT: N/A vPvB: N/A

## **SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Substances

CAS # / Substance Name

15112-89-7 Tris(dimethylamino)silane, 99+%

Identification number(s) EC number: 239-165-0

#### **SECTION 4. FIRST AID MEASURES**

Description of first aid measures

General information:

Immediately remove any clothing soiled by the product.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours

after the accident.

If inhaled:

Supply patient with fresh air. If not breathing, provide artificial respiration. Keep patient warm. Consult doctor if symptoms

persist.

In case of unconsciousness place patient stably in side position for transportation.

In case of skin contact: Immediately wash with soap and water; rinse thoroughly.

In case of eye contact: Rinse opened eye for several minutes under running water. Consult a physician.

If swallowed:

Immediately call a doctor.

Drink copious amounts of water and provide fresh air. Immediately call a doctor.

Most important symptoms and effects, both acute and delayed:

No data available

Indication of any immediate medical attention and special treatment needed

No data available

#### **SECTION 5. FIREFIGHTING MEASURES**

Extinguishing media

Suitable extinguishing agents: CO2, sand, extinguishing powder. Do not use water.

For safety reasons unsuitable extinguishing agents: Water with full jet

Special hazards arising from the substance or mixture No data available

Advice for firefighters

Protective equipment: Mouth respiratory protective device.

## **SECTION 6. ACCIDENTAL RELEASE MEASURES**

Personal precautions, protective equipment and emergency procedures

Mount respiratory protective device.

Use personal protective equipment. Keep unprotected persons away.

Environmental precautions: Prevent seepage into sewage system, workpits and cellars.

Methods and materials for containment and cleanup:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Use neutralizing agent.

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

Do not flush with water or aqueous cleansing agents

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.

## **SECTION 7. HANDLING AND STORAGE**

Precautions for safe handling Ensure good ventilation/exhaustion at the workplace.

Handling: Handle under inert gas.

Information about protection against explosions and fires:

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

Keep respiratory protective device available.

Conditions for safe storage, including any incompatibilities: Store contents under inert gas.

Requirements to be met by storerooms and receptacles: No special requirements.

Information about storage in one common storage facility: Not required.

Further information about storage conditions:

Keep receptacle tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

Specific end use(s) No data available

#### SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Additional information about design of technical systems: No further data; see item 7.

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

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.

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:

`SProtective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the

chemical mixture.

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

## **SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

Information on basic physical and chemical properties

Appearance: Form: Liquid Color: Colorless

Odor: undistinguishable

Odor threshold: No data available.

pH: No data available.

Melting point/Melting range: no data °C Boiling point/Boiling range: Undetermined.

Flash point: N/A

Flammability (solid, gas): N/A

Ignition temperature:

Decomposition temperature: No data available.

Autoignition: No data available.

Danger of explosion: No data available.

**Explosion limits:** 

Lower: No data available. Upper: No data available.

Vapor pressure: 16mm (4 °C hPa (12mm (3 °C mm Hg)

Density at 20 °C (68 °F): 0.84 g/cm<sup>3</sup> (7.01 lbs/gal)

Relative density No data available. Vapor density No data available. Evaporation rate No data available.

Solubility in / Miscibility with

Water: Not miscible or difficult to mix.

Partition coefficient (n-octanol/water): No data available.

Viscosity:

Dynamic: No data available. Kinematic: No data available. Organic solvents: 0.0 %

Other information No data available

## **SECTION 10. STABILITY AND REACTIVITY**

Reactivity

Chemical stability

Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

Possibility of hazardous reactions

Contact with water releases flammable gases.

Contact with water releases toxic gases.

Conditions to avoid No data available

Incompatible materials: No data available

Hazardous decomposition products: No dangerous decomposition products known.

#### SECTION 11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute toxicity:

Primary irritant effect:

on the skin: Caustic effect on skin and mucous membranes.

on the eye: Strong caustic effect.

Sensitization: No sensitizing effects known.

Additional toxicological information:

Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of

esophagus and stomach.

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.

#### **SECTION 12. ECOLOGICAL INFORMATION**

**Toxicity** 

Aquatic toxicity: No data available

Persistence and degradability No data available Bioaccumulative potential No data available

Mobility in soil No data available

Additional ecological information: Must not reach bodies of water or drainage ditch undiluted or

unneutralized.

Results of PBT and vPvB assessment

PBT: N/A vPvB: N/A

Other adverse effects No data available

#### **SECTION 13. DISPOSAL CONSIDERATIONS**

Waste treatment methods

Recommendation:

Must not be disposed of together with household garbage. Do not allow product to enter drains, sewage systems, or other water courses system.

Uncleaned packagings:

Recommendation: Disposal must be made according to official regulations.

## **SECTION 14. TRANSPORT INFORMATION**

UN-Number DOT, IMDG, IATA UN3129 UN proper shipping name DOT Water-reactive liquid, corrosive, n.o.s.

IMDG, IATA WATER-REACTIVE LIQUID, CORROSIVE, N.O.S.

Transport hazard class(es)

DOT

Class 4.3 Substances which, in contact with water, emit flammable gases

Label 4.3+8

IMDG, IATA

Class 4.3 Substances which, in contact with water, emit flammable gases

Label 4.3+8

Packing group

DOT, IMDG, IATA II

Environmental hazards:

Marine pollutant: No

Special precautions for user N/A

EMS Number: F-G,S-N

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code N/A Transport/Additional information:

DOT

Quantity limitations On passenger aircraft/rail: 1 L

On cargo aircraft only: 5 L

**IMDG** 

Limited quantities (LQ) 0

Excepted quantities (EQ) Code: E2

Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml

UN "Model Regulation": UN3129, Water-reactive liquid, corrosive, n.o.s., 4.3 (8), II

### **SECTION 15. REGULATORY INFORMATION**

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):

Substance is listed.

**Proposition 65** 

Chemicals known to cause cancer:

Substance is not listed.

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

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Hazard pictograms

GHS02 GHS05GHS06

Signal word Danger

Hazard-determining components of labeling:

Tris(dimethylamino)silane, 99+%

Hazard statements

H226 Flammable liquid and vapor.

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H314 Causes severe skin burns and eye damage.

Precautionary statements

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P103 Read label before use.

P231+P232 Handle under inert gas. Protect from moisture.

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin

with water/shower.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P422 Store contents under inert gas.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

#### 16. OTHER INFORMATION

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH). The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. American Elements shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. COPYRIGHT 1997-2022 AMERICAN ELEMENTS. LICENSED GRANTED TO MAKE UNLIMITED PAPER COPIES FOR INTERNAL USE ONLY.