

# 1,3,5-Tris[(3,3,3-trifluoropropyl)methyl]-cyclotrisiloxane: sc-258948



The Power to Question

## MATERIAL SAFETY DATA SHEET

### 1 Identification of substance:

**Product Name:** 1,3,5-Tris[(3,3,3-trifluoropropyl)methyl]cyclotrisiloxane  
**Catalog Number:** sc-258948  
**Supplier:** Santa Cruz Biotechnology, Inc.  
2145 Delaware Avenue  
Santa Cruz, California 95060  
800.457.3801 or 831.457.3800  
**Emergency:** ChemWatch  
Within the US & Canada: 877-715-9305  
Outside the US & Canada: +800 2436 2255  
(1-800-CHEMCALL) or call +613 9573 3112

### 2 Hazards identification

#### Classification of the substance or mixture



GHS06 Skull and crossbones

H301 Toxic if swallowed.



GHS07

H315 Causes skin irritation.

H319 Causes serious eye irritation.

#### Classification according to Directive 67/548/EEC or Directive 1999/45/EC



T; Toxic

R25: Toxic if swallowed.



Xi; Irritant

R36/38: Irritating to eyes and skin.

#### Label elements

#### Labelling according to EU guidelines:

#### Code letter and hazard designation of product:

T Toxic

#### Risk phrases:

25 Toxic if swallowed.

36/38 Irritating to eyes and skin.

#### Safety phrases:

26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

36/37 Wear suitable protective clothing and gloves.

45 In case of accident or if you feel unwell, seek medical advice immediately.

#### Hazard description:

#### WHMIS classification



#### Classification system

#### HMIS ratings (scale 0-4)

(Hazardous Materials Identification System)

HEALTH	2
FIRE	1
REACTIVITY	1

Health (acute effects) = 2

Flammability = 1

Reactivity = 1

#### **Other hazards**

#### **Results of PBT and vPvB assessment**

**PBT:** Not applicable.

**vPvB:** Not applicable.

### **3 Composition/information on ingredients**

#### **Chemical characterization: Substances**

##### **(CAS#) Description:**

1,3,5-Tris[(3,3,3-trifluoropropyl)methyl]cyclotrisiloxane (CAS# 2374-14-3)

##### **Identification number(s):**

**EINECS Number:** 219-154-7

### **4 First aid measures**

#### **Description of first aid measures**

##### **General information**

Immediately remove any clothing soiled by the product.

In case of irregular breathing or respiratory arrest provide artificial respiration.

##### **After inhalation**

Supply fresh air. If required, provide artificial respiration. Keep patient warm.

Seek immediate medical advice.

##### **After skin contact**

Immediately wash with water and soap and rinse thoroughly.

Seek immediate medical advice.

##### **After eye contact**

Rinse opened eye for several minutes under running water. Then consult a doctor.

##### **After swallowing**

Do not induce vomiting; immediately call for medical help.

Seek immediate medical advice.

### **5 Firefighting measures**

#### **Extinguishing media**

##### **Suitable extinguishing agents**

Carbon dioxide, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

##### **Special hazards arising from the substance or mixture**

In case of fire, the following can be released:

Carbon monoxide and carbon dioxide

Hydrogen fluoride (HF)

Silicon oxide

##### **Advice for firefighters**

##### **Protective equipment:**

Wear self-contained respirator.

Wear fully protective impervious suit.

### **6 Accidental release measures**

#### **Personal precautions, protective equipment and emergency procedures**

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

##### **Environmental precautions:**

Do not allow material to be released to the environment without proper governmental permits.

##### **Methods and material for containment and cleaning up:**

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

##### **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.

### **7 Handling and storage**

#### **Handling**

##### **Precautions for safe handling**

Keep container tightly sealed.

Store in cool, dry place in tightly closed containers.

Ensure good ventilation at the workplace.

**Information about protection against explosions and fires:** Keep ignition sources away.

**Conditions for safe storage, including any incompatibilities**

##### **Storage**

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

**Information about storage in one common storage facility:**

Store away from oxidizing agents.

Do not store together with acids.

**Further information about storage conditions:**

Keep container tightly sealed. Store at room temperature.

Store in cool, dry conditions in well sealed containers.

## 8 Exposure controls/personal protection

### Additional information about design of technical systems:

Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute.

### Control parameters

Components with limit values that require monitoring at the workplace: Not required.

Additional information: No data

### Exposure controls

#### Personal protective equipment

#### General protective and hygienic measures

The usual precautionary measures for handling chemicals should be followed.

Keep away from foodstuffs, beverages and feed.

Remove all soiled and contaminated clothing immediately.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

**Breathing equipment:** Use suitable respirator when high concentrations are present.

#### Protection of hands:

Impervious gloves

Check protective gloves prior to each use for their proper condition.

#### Material of gloves

The selection of suitable gloves not only depends on the material, but also on quality.

Quality will vary from manufacturer to manufacturer.

**Eye protection:** Safety glasses

**Body protection:** Protective work clothing.

## 9 Physical and chemical properties

### Information on basic physical and chemical properties

#### General Information

##### Appearance:

Form:	Solid
Formula:	C <sub>12</sub> H <sub>21</sub> F <sub>9</sub> O <sub>3</sub> Si <sub>3</sub>
Weight:	468.54

pH-value: Not applicable.

#### Change in condition

Melting point/Melting range:	34-36°C (93-97 °F)
Boiling point/Boiling range:	135°C (275 °F) (22 mmHg)
Sublimation temperature / start:	Not determined

Flash point: Not applicable

Flammability (solid, gaseous) Not determined.

Ignition temperature: Not determined

Decomposition temperature: Not determined

Auto igniting: Not determined.

Danger of explosion: Product does not present an explosion hazard.

#### Explosion limits:

Lower:	Not determined
Upper:	Not determined

Vapor pressure: Not applicable.

Density at 20°C (68 °F): 1.24 g/cm<sup>3</sup> (10.348 lbs/gal)

Relative density Not determined.

Vapour density Not applicable.

Evaporation rate Not applicable.

#### Solubility in / Miscibility with

Water:	Insoluble
--------	-----------

Segregation coefficient (n-octanol/water): Not determined.

#### Viscosity:

dynamic:	Not applicable.
kinematic:	Not applicable.

Other information No further relevant information available.

## 10 Stability and reactivity

### Reactivity

#### Chemical stability

#### Thermal decomposition / conditions to be avoided:

Decomposition will not occur if used and stored according to specifications.

**Possibility of hazardous reactions** No dangerous reactions known

#### Incompatible materials:

Oxidizing agents

Acids

**Hazardous decomposition products:**  
Carbon monoxide and carbon dioxide  
Hydrogen fluoride  
Silicon oxide

## 11 Toxicological information

**Information on toxicological effects**  
**Acute toxicity:**

**LD/LC50 values that are relevant for classification:**

Oral	LD50	180 mg/kg (rat)
Dermal	LD50	25400 mg/kg (rabbit)

**Primary irritant effect:**

**on the skin:** Irritant to skin and mucous membranes.

**on the eye:** Irritating effect.

**Sensitization:** No sensitizing effects known.

**Other information (about experimental toxicology):**

Reproductive effects have been observed on tests with laboratory animals.

**Subacute to chronic toxicity:**

**Subacute to chronic toxicity:**

The Registry of Toxic Effects of Chemical Substances (RTECS) reports the following effects in laboratory animals:

Behavioral - somnolence (general depressed activity).

Lungs, Thorax, or Respiration - dyspnea.

Liver - other changes.

Nutritional and Gross Metabolic - weight loss or decreased weight gain.

Related to Chronic Data - death.

Liver - changes in liver weight.

Blood - changes in serum composition (e.g. TP, bilirubin, cholesterol).

Biochemical - Enzyme inhibition, induction, or change in blood or tissue levels - phosphatases.

Cardiac - changes in heart weight.

Kidney, Ureter, Bladder - changes in bladder weight.

Reproductive - Paternal Effects - spermatogenesis (including genetic material, sperm morphology, motility, and count).

Reproductive - Fertility - male fertility index (e.g. # males impregnating females per # males exposed to fertile nonpregnant females)

Reproductive - Effects on Newborn - other postnatal measures or effects.

**Subacute to chronic toxicity:**

Organic silicon compounds are generally of low toxicity. Those exhibiting moisture sensitivity may be strongly irritating or corrosive on contact.

**Additional toxicological information:**

To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.

No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH.

## 12 Ecological information

**Toxicity**

**Acquatic toxicity:** No further relevant information available.

**Persistence and degradability** No further relevant information available.

**Behavior in environmental systems:**

**Bioaccumulative potential** No further relevant information available.

**Mobility in soil** No further relevant information available.

**Additional ecological information:**

**General notes:**

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Do not allow material to be released to the environment without proper governmental permits.

**Results of PBT and vPvB assessment**

**PBT:** Not applicable.

**vPvB:** Not applicable.

**Other adverse effects** No further relevant information available.

## 13 Disposal considerations

**Waste treatment methods**

**Recommendation** Consult state, local or national regulations to ensure proper disposal.

**Uncleaned packagings:**

**Recommendation:** Disposal must be made according to official regulations.

## 14 Transport information

### DOT regulations:



**Hazard class:** 6.1  
**Identification number:** UN2811  
**Packing group:** III  
**Proper shipping name (technical name):** TOXIC SOLID, ORGANIC, N.O.S. (1,3,5-Trimethyl-1,3,5-tris(3,3,3-trifluoropropyl)cyclotrisiloxane)  
**Label** 6.1

### Land transport ADR/RID (cross-border)



**ADR/RID class:** 6.1 (T2) Toxic substances  
**Danger code (Kemler):** 60  
**UN-Number:** 2811  
**Packaging group:** III  
**UN proper shipping name:** 2811 TOXIC SOLID, ORGANIC, N.O.S. (1,3,5-Trimethyl-1,3,5-tris(3,3,3-trifluoropropyl)cyclotrisiloxane)

### Maritime transport IMDG:



**IMDG Class:** 6.1  
**UN Number:** 2811  
**Label** 6.1  
**Packaging group:** III  
**EMS Number:** F-A, S-A  
**Marine pollutant:** No  
**Proper shipping name:** TOXIC SOLID, ORGANIC, N.O.S. (1,3,5-Trimethyl-1,3,5-tris(3,3,3-trifluoropropyl)cyclotrisiloxane)

### Air transport ICAO-TI and IATA-DGR:



**ICAO/IATA Class:** 6.1  
**UN/ID Number:** 2811  
**Label** 6.1  
**Packaging group:** III  
**Proper shipping name:** TOXIC SOLID, ORGANIC, N.O.S. (1,3,5-Trimethyl-1,3,5-tris(3,3,3-trifluoropropyl)cyclotrisiloxane)

UN "Model Regulation": UN2811, TOXIC SOLID, ORGANIC, N.O.S., 6.1, III

Special precautions for user Warning: Toxic substances

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable.

## 15 Regulatory information

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

### Product related hazard informations:

#### Hazard symbols:

T Toxic

#### Risk phrases:

25 Toxic if swallowed.

36/38 Irritating to eyes and skin.

**Safety phrases:**

26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

36/37 Wear suitable protective clothing and gloves.

45 In case of accident or if you feel unwell, seek medical advice immediately.

**National regulations**

All components of this product are listed in the U.S. Environmental Protection Agency Toxic Substances Control Act Chemical substance Inventory.

All components of this product are listed on the Canadian Domestic Substances List (DSL).

**Information about limitation of use:** For use only by technically qualified individuals.

**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 purport to be complete and should be used only as a guide. The burden of safe use of this material rests entirely with the user.

5/9/2013