

## **MATERIAL SAFETY DATA SHEET**

according to Regulation (EC) No. 1907/2006

Revision date: 01/08/2017 Revision number: 1

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

#### 1.1. Product Details

Product Code B391

Full Name 3,3'-Difluoro-5,5'-bis(trimethylstannyl)-2,2'-bithiophene

REACH No. A registration number is not available for this substance as the substance or its uses are

exempted from registration or the annual tonnage does not require a registration.

CAS No. 1619967-09-7

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

Identified uses Laboratory chemicals

# 1.3. Supplier details

Supplied by Ossila Limited

> Kroto Innovation Centre Broad Lane, Sheffield

S3 7HO, UK 0114 2999 180

Telephone **Email address** info@ossila.com

#### 2. Hazards identification

#### 2.1. Classification of the substance or mixture

## Hazard statements according to Regulation (EC) 1272/2008

Acute toxicity, Oral (Category 2), H300 Acute toxicity, Inhalation (Category 2), H330 Acute toxicity, Dermal (Category 2), H310 Acute aquatic toxicity (Category 1), H400 Chronic aquatic toxicity (Category 1), H410

#### 2.2. Label elements

## Labelling according Regulation (EC) No 1272/2008 [CLP]



Signal word Danger

Hazard statement(s)

Fatal if swallowed. H300 H310 Fatal in contact with skin.

H330 Fatal if inhaled.

H410 Very toxic to aquatic life with long lasting effects.

Precautionary statement(s)

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P264 Wash hands thoroughly after handling. P273 Avoid release to the environment.

P280 Wear protective gloves/ protective clothing.

**Supplemental information** None.

#### 2.3. Other hazards

None.

# 3. Composition/Information on ingredients

#### 3.1. Substances

Synonyms: : (3,3'-Difluoro-[2,2'-bithiophene]-5,5'-diyl)bis(trimethylstannane), DFBT-bisSn

#### Hazardous ingredients according to Regulation (EC) No 1272/2008

Component	CAS#	Weight %	CLP Classification
3,3'-Difluoro-5,5'-bis(trimethylstannyl)-	1619967-09-7	≤100%	Acute Tox. Oral 2 (H300); Acute Tox. Inhalation
2,2'-bithiophene			1 (H330); Acute Tox. Dermal 2 (H310); Acute
			Aqua. Tox. 1 (H400); Chronic Aqua. Tox. 1
			(H410)

# 4. First aid measures

# 4.1. Description of first aid measures

#### **After Inhalation**

If inhaled, remove to fresh air. If not breathing give artificial respiration. Call a physician.

#### After skin contact

In case of skin contact, wash with soap and flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. Call a physician.

#### After eye contact

In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

#### **After Ingestion**

If swallowed, wash out mouth with water. Call a physician.

## 4.2. Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in section 11.

## 4.3. Indication of any immediate medical attention and special treatment needed

No data available.

# 5. Fire fighting

## 5.1. Extinguishing media

**Suitable extinguishing media**: Dry chemical, alcohol-resistant foam, carbon dioxide or water spray. Consult with local fire authorities before attempting large scale fire-fighting operations.

# 5.2. Special hazards arising from the substance of mixture

Hazardous combustion products: Carbon oxides, tin oxides, sulfur oxides and hydrogen fluorides.

## 5.3. Advice for firefighters

Wear a self-contained breathing apparatus if necessary. During a fire, irritating and highly toxic gases and vapours may be generated by thermal decomposition.

#### 6. Accidental release measures

## 6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protective equipment (section 8). Avoid dust formation. Ensure room is well ventilated.

# 6.2. Environmental precautions

Do not let product enter drains.

## 6.3. Containment and cleaning

Contain and clean up spill if safe to do so using an electrically protected vacuum cleaner or by wet-brushing. Dispose of dry waste in closed container for proper disposal according to local regulations.

# 7. Handling and storage

## 7.1. Precautions for safe handling

Avoid formation of dust and aerosols. Provide exhaust ventilation in places where dust is formed.

## 7.2. Conditions for safe storage, including any incompatibilities

Store in a cool, dry and well-ventilated place inside of a tightly sealed container. Reseal containers that have been opened and keep upright to prevent leakage.

Quality-related information: Air sensitive. Protect from moisture. Handle and store under inert gas. Store locked up.

## 7.3. Specific end uses

Use in laboratories.

# 8. Exposure controls / Personal protection

## 8.1. Control parameters

# Components with workplace control parameters

Contains no substances with occupational exposure limit values.

# **Biological occupational exposure limits**

This product does not contain any hazardous materials with biological limits.

# 8.2. Exposure controls

## **Engineering measures**

Handle in accordance with good industrial engineering/laboratory practices for hygiene and safety. Ensure eyewash stations and safety showers are close to the laboratory workstation. Ensure good general ventilation is present when handling the product.

# Personal protective equipment

**Eyes:** Wear safety glasses with side-shields conforming to appropriate government standards such as NOISH (US) or EN166 (EU).

**Skin**: Handle with appropriate gloves and use proper glove removal technique to avoid skin contact. Dispose of gloves in accordance with applicable laws. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

**Clothing:** Wear complete suit protecting against chemicals; the type of equipment should be appropriate for the concentration and amount of dangerous substance used.

**Respirators:** Where protection from nuisance dusts is needed, use type N95 (US) or type P1 (EN 143) dust masks. Use multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. Respirators should be approved under appropriate government standards such as NIOSH (US) or CEN (EU).

## General hygiene measures

Wash thoroughly after handling. Wash contaminated clothing before reuse.

# 9. Physical and chemical properties

## 9.1. Information on basic physical and chemical properties

Appearance : Solid white powder/flakes/crystals

Odour No data available Odour threshold No data available No data available Melting/freezing point No data available Boiling point/range No data available No data available Flash point **Evaporation rate** No data available No data available Flammability **Explosive limits** No data available Vapour pressure No data available Vapour density No data available Relative density No data available Solubility(ies) No data available Partition coefficient: *n*-octanol/water No data available No data available Autoignition temperature Decomposition temperature No data available Viscosity No data available **Explosive properties** No data available Oxidising properties No data available

# 9.2. Other safety information

No data available.

# 10. Stability and reactivity

#### 10.1 Reactivity

No data available.

#### 10.2. Chemical stability

Stable under normal temperatures and pressures under recommended storage conditions.

#### 10.3. Possibility of hazardous reactions

No data available.

## 10.4. Conditions to avoid

No data available.

## 10.5. Incompatible materials

Strong oxidising agents.

# 10.6. Hazardous decomposition products

No known hazardous decomposition products.

# 11. Toxicological information

## 11.1. Information on toxicological effects

#### **Acute toxicity**

No data available.

Skin corrosion/irritation

No data available.

Serious eye damage/eye irritation

No data available.

Respiratory or skin sensitization

No data available.

Germ cell mutagenicity

No data available.

Carcinogenicity

No data available.

Reproductive toxicity

No data available.

Specific target organ toxicity - single exposure

No data available.

Specific target organ toxicity - repeated exposure

No data available.

**Aspiration hazard** 

No data available.

**Routes of exposure** 

Eye contact, ingestion, inhalation, skin contact.

#### Signs and Symptoms of Exposure

Skin: inflammation (redness, swelling, itching and pain). Eyes: inflammation, tearing, impaired vision and pain. Inhalation: cough, nose and throat pain.

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

# 12. Ecological information

## 12.1. Toxicity

No data available.

## 12.2. Persistence and degradability

No data available.

## 12.3. Bioaccumulative potential

No data available.

## 12.4. Mobility in soil

No data available.

## 12.5. Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

#### 12.6. Other adverse effects

No data available.

## 13. Disposal

#### 13.1. Waste treatment methods

#### **Product**

Burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state and local environmental regulations and directives on waste and hazardous waste. Offer surplus material to a licensed professional waste disposal professional.

#### **Contaminated packaging**

Dispose of as unused product.

# 14. Transport

# 14.1. UN number

ADR/RID: 3146 IMDG: 3146 IATA: 3146

## 14.2. UN proper shipping name

ADR/RID: Organotin compound, solid, n.o.s. (3,3'-Difluoro-5,5'-bis(trimethylstannyl)-2,2'-bithiophene)
IMDG: Organotin compound, solid, n.o.s. (3,3'-Difluoro-5,5'-bis(trimethylstannyl)-2,2'-bithiophene)
IATA: Organotin compound, solid, n.o.s. (3,3'-Difluoro-5,5'-bis(trimethylstannyl)-2,2'-bithiophene)

## 14.3. Transport hazard class

ADR/RID: 6.1 IMDG: 6.1 IATA: 6.1

## 14.4. Packaging group

ADR/RID: III IMDG: III IATA: III

#### 14.5. Environmental hazards

ADR/RID: no IMDG Marine pollutant: yes IATA: no

## 14.6. Special precautions for user

No special precautions required.

## 15. Regulatory information

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006, the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

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

No data available.

# 15.2 Chemical safety assessment

No chemical safety report/assessment was carried out for this product.

## 16. Other information

# Warranty

This material is for research and development use only. The information provided here is based upon the available information from material suppliers but not warranted as complete and is provided only as a guide. Ossila Limited shall not be held responsible for any damage resulting from use or handling of this product.