

# MATERIAL SAFETY DATA SHEET

## 2,6-dibromo-4,4-bis(2-ethylhexyl)-4H-cyclopenta[1,2-b:5,4-b']dithiophene



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

#### 1.1. Product Details

Product Code : B211  
Name : 2,6-dibromo-4,4-bis(2-ethylhexyl)-4H-cyclopenta[1,2-b:5,4-b']dithiophene  
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. : 365547-21-3

#### 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 7HQ, UK  
Telephone : 0114 213 2770  
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 4)

Skin irritation (Category 2)

Eye irritation (Category 2)

Specific target organ toxicity - single exposure (Category 3)

##### Hazard statements defined under EU Directive 67/548/EE or 1999/45/EC:

Symbol	Description	Code
Xn	Harmful if swallowed. Irritating to eyes, respiratory system and skin.	R22, R36/37/38

#### 2.2. Label elements

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



**Signal word** : Warning  
**Hazard statement(s)**  
H302 : Harmful if swallowed.  
H315 : Causes skin irritation.  
H319 : Causes serious eye irritation.  
H335 : May cause respiratory irritation.

### Precautionary statement(s)

P261 Avoid breathing dust.  
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

**Supplemental Hazard Statements** None.

### 2.3. Other hazards

None.

## 3. Composition/Information on ingredients

### 3.1. Substances

Synonyms : 2,6-Dibrom-4,4-bis(2-ethylhexyl)-4H-thieno[3',2':4,5]cyclopenta[1,2-b]thiophen  
2,6-Dibromo-4,4-bis(2-ethylhexyl)-4H-thieno[3',2':4,5]cyclopenta[1,2-b]thiophene  
4H-Cyclopenta[1,2-b:5,4-b']dithiophene, 2,6-dibromo-4,4-bis(2-ethylhexyl)-  
2,6-dibromo-4,4-bis(2-ethylhexyl)-4h-cyclopenta(2,1-b:3,4-b')dithiophene  
2,6-Dibromo-4,4-bis(2-ethylhexyl)-4H-cyclopenta[2,1-b:3,4-b']dithiophene

Formula :  $C_{25}H_{36}Br_2S_2$   
CAS No. : 365547-21-3  
EC No. :

No components need to be disclosed according to the applicable regulations.

## 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 the labelling (see section 2.2) and/or 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**

Use agent most appropriate to extinguish fire. In case of small fire, use "alcohol" foam, dry chemical or carbon dioxide. For large fires apply water from as safe a distance as possible. Use very large quantities or spraying water opposed to a solid stream.

### **5.2. Special hazards arising from the substance of mixture**

#### **Hazardous combustion products**

Carbon oxides, nitrogen oxides, sulfur oxides.

### **5.3. Advice for firefighters**

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. 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. Avoid breathing in vapours, mist, gas or dust. Ventilate room and wash spill area if safe to do so because vapours can accumulate in low areas and form explosive concentrations. Remove all sources of ignition.

### **6.2. Environmental precautions**

Should not be released into the environment; do not let product enter drains.

### **6.3. Containment and cleaning:**

Contain and clean up spill if safe to do so and 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 contact with eyes, skin, and clothing. Avoid inhalation of dust or vapour. Keep away from sources of ignition and avoid the build of electrostatic charge. In case of an accident or if you are feeling unwell, immediately seek medical advice.

### **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.

Light sensitive and air sensitive. Handle and store under inert gas.

### **7.3. Specific end uses**

Use in laboratories.

## 8. Exposure controls / Personal protection

### 8.1. Control parameters

#### Exposure limit sources

UK – EH40 Workplace Exposure Limits (WEL) for use with the Control of Substances Hazardous to Health (COSHH) Regulations.

#### Components with workplace control parameters

Component	CAS #	Control parameters
2,6-dibromo-4,4-bis(2-ethylhexyl)-4H-cyclopenta[1,2-b:5,4-b']dithiophene	365547-21-3	No available data

TWA - time weighted average; STEL - Short Term Exposure Limit

### 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 practices for hygiene and safety. Ensure eyewash stations and safety showers are close to the laboratory workstation.

#### 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:** A respiratory protection program that meets OSHA's 29 CFR §1910.134 and ANSI Z88.2 requirements or European standard EN 149 must be followed whenever workplace conditions warrant a respirator's use.

#### 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	:	liquid
Odour	:	No data available
Odour threshold	:	No data available
Molecular weight	:	560.49 g/mol
pH	:	No data available
Melting/freezing point	:	No data available
Flash point	:	No data available
Evaporation rate	:	No data available
Flammability	:	No data available
Upper/lower flammability or explosive limits	:	No data available

Vapour pressure	:	No data available
Vapour density	:	No data available
Relative density	:	No data available
Water solubility	:	No data available
Partition coefficient	:	No data available
<i>n</i> -octanol/water		
Autoignition temperature	:	No data available
Decomposition temperature	:	No data available
Viscosity	:	No data available
Explosive properties	:	No data available
Oxidizing 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

Exposure to light/sunlight.

### 10.5. Incompatible materials

Strong oxidising agents.

### 10.6. Hazardous decomposition products

Not determined. Hazardous polymerisation not expected.

## 11. Toxicological information

### 11.1. Information on toxicological effects

#### Acute toxicity

No data available.

#### Skin corrosion/irritation

Based on available data the classification criteria are not met

#### Serious eye damage/eye irritation

No data available.

#### Respiratory or skin sensitization

Based on available data the classification criteria are not met

#### 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.

**Potential health effects**

Inhalation No data available.

Ingestion No data available.

Skin No data available.

Eyes No data available.

**Signs and Symptoms of Exposure**

No data available.

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

Readily biodegradable. Persistence is unlikely based on available information.

### 12.3. Bioaccumulative potential

Bioaccumulation is unlikely.

### 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, but substance is not considered (very) persistent, (very) bioaccumulative and toxic (PBT/vPvB).

### 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 in accordance with European 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

IATA:

#### **14.1. UN number**

ADR/RID: -    IMDG: -    IATA: -

#### **14.2. UN proper shipping name**

ADR/RID:    Not dangerous goods  
IMDG:    Not dangerous goods  
IATA:    Not dangerous goods

#### **14.3. Transport hazard class**

ADR/RID: -    IMDG: -    IATA:-

#### **14.4. Packaging group**

ADR/RID: -    IMDG: -    IATA: -

#### **14.5. Environmental hazards**

No hazards identified.

#### **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.

#### **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.