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

1.1. Product Details

Product Code : M151
Name : 6,13-Bis(triisopropylsilyl)ethynyl)pentacene
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. : 373596-08-8

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
Skin irritant (Category 2)
Eye irritant, (Category 2)
Specific target organ toxicity – single exposure (Category 3)

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

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Description</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Xi</td>
<td>Irritating to eyes and skin</td>
<td>R36/37/38</td>
</tr>
</tbody>
</table>

2.2. Label elements

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

Signal word  Warning
Hazard statement(s)
H315 Causes skin irritation
H319 Causes serious eye irritation
H335 May cause respiratory irritation

Precautionary statement(s)
P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray
Supplemental Hazard Statements
None.

2.3. Other hazards
None.

3. Composition/Information on ingredients

3.1. Substances
Synonyms: TIPS-pentacene
Formula: C_{44}H_{54}Si_{2}

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS #</th>
<th>Weight %</th>
<th>CLP Classification</th>
<th>DSD Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>6,13-Bis(triisopropylsilylthynyl)pentacene</td>
<td>373596-08-8</td>
<td>99.9</td>
<td>Skin Irrit. 2 (H315), Eye Irrit. 2 (H319), STOT SE 3 (H335)</td>
<td>Xi; R36/37/38</td>
</tr>
</tbody>
</table>

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.

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 dust formation. Avoid breathing in vapours, mist, gas or dust. Ensure room is well ventilated. Remove all sources of ignition.

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. Sweep up and shovel without raising dust. 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 formation of dust or vapour. Provide exhaust ventilation in places where dust is formed. 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. Product is light sensitive. Store in the dark.

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.

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**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Dark purple crystalline solid</td>
</tr>
<tr>
<td>Odour</td>
<td>No data available</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting/freezing point</td>
<td>276 °C (lit.)</td>
</tr>
<tr>
<td>Flash point</td>
<td>No data available</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive limits</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapour density</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative density</td>
<td>1.104 g/cm³ at 25 °C</td>
</tr>
<tr>
<td>Water solubility</td>
<td>Negligible</td>
</tr>
<tr>
<td>Solubility</td>
<td>Chlorobenzene, chloroform, tetrahydrofuran, toluene, xylenes</td>
</tr>
<tr>
<td>Partition coefficient</td>
<td>No data available</td>
</tr>
<tr>
<td>n-octanol/water</td>
<td>No data available</td>
</tr>
<tr>
<td>Autoignition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>Not explosive</td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td>Not a strong oxidiser</td>
</tr>
</tbody>
</table>

9.2. **Other safety information**

Light sensitive.

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.

10.5. Incompatible materials
Strong acids and 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**
Skin irritant category 2.

**Serious eye damage/eye irritation**
Eye irritant category 2.

**Respiratory or skin sensitization**
Not determined.

**Germ cell mutagenicity**
Not determined.

**Carcinogenicity**
Not determined.

**Reproductive toxicity**
Not determined.

**Specific target organ toxicity - single exposure**
STOT SE category 3

**Specific target organ toxicity - repeated exposure**
Not determined.

**Aspiration hazard**
Not determined.

**Potential health effects**

<table>
<thead>
<tr>
<th>Exposure</th>
<th>Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inhalation</td>
<td>May be harmful if inhaled. Causes respiratory tract irritation.</td>
</tr>
<tr>
<td>Ingestion</td>
<td>May be harmful if swallowed.</td>
</tr>
<tr>
<td>Skin</td>
<td>May be harmful if absorbed through skin. Causes skin irritation.</td>
</tr>
<tr>
<td>Eyes</td>
<td>Causes serious eye irritation.</td>
</tr>
</tbody>
</table>

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

12. Ecological information

12.1. Toxicity
Not determined.

12.2. Persistence and degradability
Not determined.

12.3. Bioaccumulative potential
Not determined.
12.4. Mobility in soil
Not determined.

12.5. Results of PBT and vPvB assessment
Not determined.

12.6. Other adverse effects
Not determined.

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

Non-hazardous for road, air and sea transport.

IATA: Not regulated as a hazardous material.
IMO: Not regulated as a hazardous material.
RID/ADR: Not regulated as a hazardous material.

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.