ACCORDING TO EC-REGULATIONS 1907/2006 (REACH), 1272/2008 (CLP) & 2015/830

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier
Product Name: PTB7-Th (PCE10)
Synonyms: PBDTTT-EFT, PCE-10
Chemical Name: Poly[4,8-bis(5-[2-ethylhexyl]thiophen-2-yl)benzo[1,2-b;4,5-b']dithiophene-2,6-diyl-alt-(4-[2-ethylhexyl]-3-fluorothieno[3,4-b]thiophene-2-carboxylate-2-6-diyl)]
Chemical Formula: (C49H57S6O2F)n
CAS No.: 1469791-66-9
EC No.: Not available.
Index No.: Not available.
REACH Registration No.: Not applicable.

1.2 Relevant identified uses of the substance or mixture and uses advised against
Identified Use(s): PC21 Laboratory chemicals, Research and development use only

1.3 Details of the supplier of the safety data sheet
Company Identification: Ossila Limited
Address of Supplier: Solpro Business Park
Windsor Street
Sheffield
Postal code: S4 7WB, UK
Telephone: +441142999180
E-mail: info@ossila.com
Office hours: 08:00 - 17:00

1.4 Emergency telephone number
Emergency Phone #: +44 (0) 20 3885 0382 (CHEMTREC)

<table>
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<th>Other Regions</th>
<th>Emergency Phone Number (CHEMTREC)</th>
</tr>
</thead>
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<tr>
<td>Europe, Middle East, Africa</td>
<td>+44 20 3885 0382</td>
</tr>
<tr>
<td>North America</td>
<td>+1 703 527 3887</td>
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<td>+52 55 8526 4930</td>
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<td>South America</td>
<td>+55 11 4349 1359</td>
</tr>
<tr>
<td>Asia, India, and Oceania</td>
<td>+65 3163 8374</td>
</tr>
</tbody>
</table>

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture
Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

2.2 Label elements
The product does not need to be labelled in accordance with EC directives or respective national laws.

2.3 Other hazards
This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

2.4 Additional information
Not applicable.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

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

3.2 Mixtures
Not applicable.

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures
General Advice: First aiders should ensure they have taken adequate steps to protect themselves from exposure (see Section 8 for recommended personal protection equipment) Show this safety data sheet to the doctor in attendance.
Inhalation: Remove person to fresh air and keep comfortable for breathing. Get medical advice/attention if you feel unwell.
Skin Contact: Rinse skin with water. If skin irritation occurs, get medical advice/attention.
Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Ingestion: Rinse out mouth with water. Get medical advice/attention if you feel unwell.

4.2 Most important symptoms and effects, both acute and delayed
Most important symptoms and effects, both acute and delayed, are included on labelling (Section 2.2) and in Section 11.

4.3 Indication of any immediate medical attention and special treatment needed
Treat symptomatically.
SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media
Suitable Extinguishing media: As appropriate for surrounding fire.
Unsuitable extinguishing media: As appropriate for surrounding fire.

5.2 Special hazards arising from the substance or mixture
Carbon oxides
Sulfur oxides
Hydrogen fluoride

5.3 Advice for firefighters
Fire fighters should wear complete protective clothing including self-contained breathing apparatus.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures
Follow safe handling advice and personal protective equipment recommendations (as per section 8). Provide adequate ventilation.

6.2 Environmental precautions
Avoid release to the environment.

6.3 Methods and material for containment and cleaning up
Sweep up spilled substance but avoid making dust. Use vacuum equipment for collecting spilt materials, where practicable. Dispose of contents in accordance with local, state or national legislation.

6.4 Reference to other sections
See Also Section 8, 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling
Advice on safe handling: Avoid inhalation, ingestion, and contact with skin and eyes. Use only in a well-ventilated area. Wear protective clothing as per section 8.
Hygiene measures: Keep away from food and drink. Wash hands after handling, before breaks, and at the end of workday.

7.2 Conditions for safe storage, including any incompatibilities
Store in a well-ventilated place. Keep container tightly closed.

Storage temperature: Ambient.
Storage life: Product is air, and light sensitive. Store in the dark. Handle and store under inert gas.

Incompatible materials: None known.

7.3 Specific end use(s)
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

SECTION 8: EXPOSURE CONTROLS/PERSOAL PROTECTION

8.1 Control parameters
8.1.1 Occupational Exposure Limits: No Occupational Exposure Limit assigned.

8.2 Exposure controls
8.2.1 Appropriate engineering controls: Ensure adequate ventilation and/or exhaust. A washing facility/water for eye and skin cleaning purposes should be present.
8.2.2 Personal protection equipment:
- Eye Protection: Wear eye protection with side protection tested and approved under appropriate government standards such as EN166 (EU).
- Hand protection: Handle with gloves. Gloves must be inspected prior to use and proper glove removal techniques should be used. The selected protective gloves have to satisfy the specifications of Regulation (EU) 2016/425 and the standard EN 374 derived from it.
- Body protection: Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place.
- Respiratory protection: No personal respiratory protection is necessary under normal circumstances.
- Thermal hazards: None known.
8.2.3 Environmental Exposure Controls: Avoid release to the environment.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties
- Colour: Dark Brown.
- Odour: Not known.
- Odour threshold: Not known.
- Melting point/freezing point: Not known.
- Initial boiling point and boiling range: Not known.
- Flammability: Not known.
- Lower and upper explosion limit: Not known.
Flash Point: Not known.
Auto-ignition temperature (°C): Not known.
Decomposition temperature (°C): Not known.
pH: Not known.
Kinematic viscosity: Not known.
Vapour pressure: Not known.
Density: Not known.
Relative density: Not known.
Relative vapour density: Not known.
Particle characteristics: Not known.

9.2 Other information
None.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity
None anticipated.

10.2 Chemical Stability
Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions
Not known.

10.4 Conditions to avoid
Not known.

10.5 Incompatible materials
Not known.

10.6 Hazardous decomposition products
In the event of fire: see Section 5.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects
Acute toxicity - Ingestion: No data available
Acute toxicity - Skin Contact: No data available
Acute toxicity - Inhalation: No data available
Skin corrosion/irritation: No data available
Serious eye damage/irritation: No data available
Skin sensitization data: No data available
Respiratory sensitization data: No data available
Germ cell mutagenicity: No data available
Carcinogenicity: No data available
Reproductive toxicity: No data available
Lactation: No data available
STOT - single exposure: No data available
STOT - repeated exposure: No data available
Aspiration hazard: No data available

11.2 Information on other hazards
11.2.1 Endocrine disrupting properties
None known.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity
Toxicity - Aquatic invertebrates: No data available
Toxicity - Fish: No data available
Toxicity - Algae: No data available
Toxicity - Sediment Compartment: No data available
Toxicity - Terrestrial Compartment: No data available

12.2 Persistence and Degradation
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
This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.
12.6 Endocrine disrupting properties
Not known.

12.7 Other adverse effects
Not known.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods
Dispose of contents in accordance with local, state or national legislation. Recycle only completely emptied packaging. Normal disposal is via incineration operated by an accredited disposal contractor. Send to a licensed recycler, reclaimer or incinerator.

13.2 Additional Information
Disposal should be in accordance with local, state or national legislation.

SECTION 14: TRANSPORT INFORMATION

IATA/IMO/RID/ADR
Not classified as hazardous for transport.

SECTION 15: REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
European Regulations - Authorisations and/or Restrictions On Use
Candidate List of Substances of Very High Concern for Authorisation
Not listed
REACH: ANNEX XIV list of substances subject to authorisation
Not listed
REACH: Annex XVII Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles
Not listed
Community Rolling Action Plan (CoRAP)
Regulation (EC) N° 1005/2009 on substances that deplete the ozone layer
Not listed
National regulations
Other
Not known.

15.2 Chemical Safety Assessment
A REACH chemical safety assessment has not been carried out.

SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements:

LEGEND

Acronyms

ADN : European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR : European Agreement concerning the International Carriage of Dangerous Goods by Road
CAS : Chemical Abstracts Service
CLP : Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
DNEL : Derived No Effect Level
EC : European Community
EINECS : European Inventory of Existing Commercial Chemical Substances
IATA : International Air Transport Association
IBC : Intermediate Bulk Container
ICAO : International Civil Aviation Organization
IMDG : International Maritime Dangerous Goods
LTTEL : Long term exposure limit
PBT : Persistent, Bioaccumulative and Toxic
PNEC : Predicted No Effect Concentration
REACH : Registration, Evaluation, Authorisation and Restriction of Chemicals
RID : Regulations concerning the International Carriage of Dangerous Goods by Rail
STEL : Short term exposure limit
STOT : Specific Target Organ Toxicity
UN : United Nations
vPvB : very Persistent and very Bioaccumulative

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