

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 su	bstance 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 safet	ty data sheet
Company Identification	Ossila Limited

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)

Other Regions	Emergency Phone Number (CHEMTREC)
Europe, Middle East, Africa	+44 20 3885 0382
North America	+1 703 527 3887
Central America	+52 55 8526 4930
South America	+55 11 4349 1359
Asia, India, and Oceania	+65 3163 8374

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 modic	al attention and enorial treatment needed

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.



SECTION 5: FIREFIGHTING MEASURE	S
E 1. Extinguishing modio	
5.1 Extinguishing media	An annualista fan armarundina fina
Suitable Extinguishing media	As appropriate for surrounding fire.
Unsuitable extinguishing media	As appropriate for surrounding fire.
5.2 Special hazards arising from the s	
	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 M	FASURES
6.1 Personal precautions, protective e	
	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 containn	nent 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-
, and of early handling	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
nygiene measures	the end of workday.
7.2. Conditions for acts stores inclus	
7.2 Conditions for safe storage, includ	
o , , , , , , , , , , , , , , , , , , ,	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/P	ERSONAL PROTECTION
8.1 Control parameters	
8.1.1 Occupational Exposure Limits	
	No Occupational Exposure Limit assigned
	No Occupational Exposure Limit assigned.
8.2 Exposure controls	Encourse a descusta constituition and (an activation of According to the Production for the
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	
	Wear eye protection with side protection tested and approved under appropriate
Eye Protection	
Eye Protection	government standards such as EN166 (EU).
Eye Protection Hand protection	government standards such as EN166 (EU). Handle with gloves. Gloves must be inspected prior to use and proper glove remova
	government standards such as EN166 (EU).
	government standards such as EN166 (EU). Handle with gloves. Gloves must be inspected prior to use and proper glove remova
	government standards such as EN166 (EU). Handle with gloves. Gloves must be inspected prior to use and proper glove remova techniques should be used. The selected protective gloves have to satisfy the
Hand protection	government standards such as EN166 (EU). Handle with gloves. Gloves must be inspected prior to use and proper glove remova 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 Choose body protection in relation to its type, to the concentration and amount of
Hand protection Body protection	government standards such as EN166 (EU). Handle with gloves. Gloves must be inspected prior to use and proper glove remova 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 Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place.
Hand protection Body protection Respiratory protection	government standards such as EN166 (EU). Handle with gloves. Gloves must be inspected prior to use and proper glove remova 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 Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place. No personal respiratory protection is necessary under normal circumstances.
Hand protection Body protection Respiratory protection Thermal hazards	government standards such as EN166 (EU). Handle with gloves. Gloves must be inspected prior to use and proper glove remova 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 Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place. No personal respiratory protection is necessary under normal circumstances. None known.
Hand protection Body protection Respiratory protection	government standards such as EN166 (EU). Handle with gloves. Gloves must be inspected prior to use and proper glove remova 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 Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place. No personal respiratory protection is necessary under normal circumstances. None known.
Hand protection Body protection Respiratory protection Thermal hazards	government standards such as EN166 (EU). Handle with gloves. Gloves must be inspected prior to use and proper glove remova 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 Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place. No personal respiratory protection is necessary under normal circumstances. None known. Avoid release to the environment.

9.1 Information on basic physical and chemical properties		
Physical State	Solid: Powder/Fibres.	
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.
Solubility(ies)	Solubility (Water): Not known.
	Solubility (Other): Not known.
Partition coefficient: n-octanol/water (log	Not known.
value)	
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 REACTIV	/ITY
10.1 Reactivity	
	None anticipated.
10.2 Chemical Stability	Nono antiopatoa.
	Stable under recommended storage conditions.
10.3 Possibility of hazardous reaction	
	Not known.
10.4 Conditions to avoid	
	Not known.
10.5 Incompatible materials	
	Not known.
10.6 Hazardous decomposition produ	cts
	In the event of fire: see Section 5.
SECTION 11: TOXICOLOGICAL INFORM	MATION
11.1 Information on toxicological effect	
11.1 Information on toxicological effe Acute toxicity - Ingestion	cts
11.1 Information on toxicological effect	cts No data available
11.1 Information on toxicological effe Acute toxicity - Ingestion Acute toxicity - Skin Contact	c ts No data available No data available
11.1 Information on toxicological effe Acute toxicity - Ingestion Acute toxicity - Skin Contact Acute toxicity - Inhalation	c ts No data available No data available No data available
11.1 Information on toxicological effe Acute toxicity - Ingestion Acute toxicity - Skin Contact Acute toxicity - Inhalation Skin corrosion/irritation	cts No data available No data available No data available No data available
11.1 Information on toxicological effec Acute toxicity - Ingestion Acute toxicity - Skin Contact Acute toxicity - Inhalation Skin corrosion/irritation Serious eye damage/irritation Skin sensitization data Respiratory sensitization data	cts No data available No data available No data available No data available No data available
11.1 Information on toxicological effec Acute toxicity - Ingestion Acute toxicity - Skin Contact Acute toxicity - Inhalation Skin corrosion/irritation Serious eye damage/irritation Skin sensitization data Respiratory sensitization data Germ cell mutagenicity	cts No data available No data available
11.1 Information on toxicological effect Acute toxicity - Ingestion Acute toxicity - Skin Contact Acute toxicity - Inhalation Skin corrosion/irritation Serious eye damage/irritation Skin sensitization data Respiratory sensitization data Germ cell mutagenicity Carcinogenicity	Cts No data available
11.1 Information on toxicological effect Acute toxicity - Ingestion Acute toxicity - Skin Contact Acute toxicity - Inhalation Skin corrosion/irritation Serious eye damage/irritation Skin sensitization data Respiratory sensitization data Germ cell mutagenicity Carcinogenicity Reproductive toxicity	cts No data available
11.1 Information on toxicological effect Acute toxicity - Ingestion Acute toxicity - Skin Contact Acute toxicity - Inhalation Skin corrosion/irritation Serious eye damage/irritation Skin sensitization data Respiratory sensitization data Germ cell mutagenicity Carcinogenicity Reproductive toxicity Lactation	cts No data available
11.1 Information on toxicological effect Acute toxicity - Ingestion Acute toxicity - Skin Contact Acute toxicity - Inhalation Skin corrosion/irritation Serious eye damage/irritation Skin sensitization data Respiratory sensitization data Germ cell mutagenicity Carcinogenicity Reproductive toxicity Lactation STOT - single exposure	cts No data available N
11.1 Information on toxicological effect Acute toxicity - Ingestion Acute toxicity - Skin Contact Acute toxicity - Inhalation Skin corrosion/irritation Serious eye damage/irritation Skin sensitization data Respiratory sensitization data Germ cell mutagenicity Carcinogenicity Reproductive toxicity Lactation STOT - single exposure STOT - repeated exposure	ts No data available No
11.1 Information on toxicological effect Acute toxicity - Ingestion Acute toxicity - Skin Contact Acute toxicity - Inhalation Skin corrosion/irritation Skin sensitization data Respiratory sensitization data Germ cell mutagenicity Carcinogenicity Reproductive toxicity Lactation STOT - single exposure STOT - repeated exposure Aspiration hazard	cts No data available N
 11.1 Information on toxicological effect Acute toxicity - Ingestion Acute toxicity - Skin Contact Acute toxicity - Inhalation Skin corrosion/irritation Serious eye damage/irritation Skin sensitization data Respiratory sensitization data Germ cell mutagenicity Carcinogenicity Reproductive toxicity Lactation STOT - single exposure STOT - repeated exposure Aspiration hazard 11.2 Information on other hazards 	ts No data available No
11.1 Information on toxicological effect Acute toxicity - Ingestion Acute toxicity - Skin Contact Acute toxicity - Inhalation Skin corrosion/irritation Skin sensitization data Respiratory sensitization data Germ cell mutagenicity Carcinogenicity Reproductive toxicity Lactation STOT - single exposure STOT - repeated exposure Aspiration hazard	ctsNo data availableNo data available
 11.1 Information on toxicological effect Acute toxicity - Ingestion Acute toxicity - Skin Contact Acute toxicity - Inhalation Skin corrosion/irritation Serious eye damage/irritation Skin sensitization data Respiratory sensitization data Germ cell mutagenicity Carcinogenicity Reproductive toxicity Lactation STOT - single exposure STOT - repeated exposure Aspiration hazard 11.2.1 Endocrine disrupting properties 	ts No data available No
 11.1 Information on toxicological effect Acute toxicity - Ingestion Acute toxicity - Skin Contact Acute toxicity - Inhalation Skin corrosion/irritation Serious eye damage/irritation Skin sensitization data Respiratory sensitization data Germ cell mutagenicity Carcinogenicity Reproductive toxicity Lactation STOT - single exposure STOT - repeated exposure Aspiration hazard 11.2 Information on other hazards 	Xis No data available None known.
 11.1 Information on toxicological effect Acute toxicity - Ingestion Acute toxicity - Skin Contact Acute toxicity - Inhalation Skin corrosion/irritation Serious eye damage/irritation Skin sensitization data Respiratory sensitization data Germ cell mutagenicity Carcinogenicity Reproductive toxicity Lactation STOT - single exposure STOT - repeated exposure Aspiration hazard 11.2.1 Endocrine disrupting properties 	ctsNo data availableNo data available
 11.1 Information on toxicological effect Acute toxicity - Ingestion Acute toxicity - Skin Contact Acute toxicity - Inhalation Skin corrosion/irritation Serious eye damage/irritation Skin sensitization data Respiratory sensitization data Germ cell mutagenicity Carcinogenicity Reproductive toxicity Lactation STOT - single exposure STOT - repeated exposure Aspiration hazard 11.2.1 Endocrine disrupting properties 	ts No data available None known. None known.
 11.1 Information on toxicological effect Acute toxicity - Ingestion Acute toxicity - Skin Contact Acute toxicity - Inhalation Skin corrosion/irritation Serious eye damage/irritation Skin sensitization data Respiratory sensitization data Germ cell mutagenicity Carcinogenicity Reproductive toxicity Lactation STOT - single exposure STOT - repeated exposure Aspiration hazard 11.2.1 Endocrine disrupting properties 11.2.2. Information on other hazards SECTION 12: ECOLOGICAL INFORMAT 	ts No data available None known. None known.
 11.1 Information on toxicological effect Acute toxicity - Ingestion Acute toxicity - Skin Contact Acute toxicity - Inhalation Skin corrosion/irritation Serious eye damage/irritation Skin sensitization data Respiratory sensitization data Germ cell mutagenicity Carcinogenicity Reproductive toxicity Lactation STOT - single exposure STOT - repeated exposure Aspiration hazard 11.2.1 Endocrine disrupting properties 11.2.2. Information on other hazards SECTION 12: ECOLOGICAL INFORMAT 12.1 Toxicity 	S No data available None known. TON
 11.1 Information on toxicological effect Acute toxicity - Ingestion Acute toxicity - Skin Contact Acute toxicity - Inhalation Skin corrosion/irritation Serious eye damage/irritation Skin sensitization data Respiratory sensitization data Germ cell mutagenicity Carcinogenicity Reproductive toxicity Lactation STOT - single exposure STOT - repeated exposure Aspiration hazard 11.2.1 Endocrine disrupting properties 11.2.2. Information on other hazards SECTION 12: ECOLOGICAL INFORMAT 12.1 Toxicity Toxicity - Aquatic invertebrates 	ts No data available None known. TON No data available No data available
 11.1 Information on toxicological effect Acute toxicity - Ingestion Acute toxicity - Skin Contact Acute toxicity - Inhalation Skin corrosion/irritation Serious eye damage/irritation Skin sensitization data Respiratory sensitization data Germ cell mutagenicity Carcinogenicity Reproductive toxicity Lactation STOT - single exposure STOT - repeated exposure Aspiration hazard 11.2.1 Endocrine disrupting properties 11.2.2. Information on other hazards SECTION 12: ECOLOGICAL INFORMAT 12.1 Toxicity Toxicity - Aquatic invertebrates Toxicity - Fish 	zts No data available None known. TON No data available No data available No data available No data available None known. TON No data available No data available No data available
 11.1 Information on toxicological effect Acute toxicity - Ingestion Acute toxicity - Skin Contact Acute toxicity - Inhalation Skin corrosion/irritation Serious eye damage/irritation Skin sensitization data Respiratory sensitization data Germ cell mutagenicity Carcinogenicity Reproductive toxicity Lactation STOT - single exposure STOT - repeated exposure Aspiration hazard 11.2 Information on other hazards 11.2.1 Endocrine disrupting properties 11.2.2. Information on other hazards SECTION 12: ECOLOGICAL INFORMAT 12.1 Toxicity Toxicity - Aquatic invertebrates Toxicity - Fish Toxicity - Algae 	zts No data available None known. TION No data available No data available
 11.1 Information on toxicological effect Acute toxicity - Ingestion Acute toxicity - Skin Contact Acute toxicity - Inhalation Skin corrosion/irritation Serious eye damage/irritation Skin sensitization data Respiratory sensitization data Germ cell mutagenicity Carcinogenicity Reproductive toxicity Lactation STOT - single exposure STOT - repeated exposure Aspiration hazard 11.2 Information on other hazards 11.2.1 Endocrine disrupting properties 11.2.2. Information on other hazards SECTION 12: ECOLOGICAL INFORMAT 12.1 Toxicity Toxicity - Aquatic invertebrates Toxicity - Fish Toxicity - Algae Toxicity - Sediment Compartment 	ts No data available None known. TON No data available No data available
 11.1 Information on toxicological effect Acute toxicity - Ingestion Acute toxicity - Skin Contact Acute toxicity - Inhalation Skin corrosion/irritation Serious eye damage/irritation Skin sensitization data Germ cell mutagenicity Carcinogenicity Reproductive toxicity Lactation STOT - single exposure STOT - repeated exposure Anternation on other hazards 11.2.1 Endocrine disrupting properties 11.2.2. Information on other hazards SECTION 12: ECOLOGICAL INFORMAT Toxicity - Aquatic invertebrates Toxicity - Fish Toxicity - Algae Toxicity - Sediment Compartment Toxicity - Terrestrial Compartment 	zts No data available None known. TION No data available No data available
 11.1 Information on toxicological effect Acute toxicity - Ingestion Acute toxicity - Skin Contact Acute toxicity - Inhalation Skin corrosion/irritation Serious eye damage/irritation Skin sensitization data Respiratory sensitization data Germ cell mutagenicity Carcinogenicity Reproductive toxicity Lactation STOT - single exposure STOT - repeated exposure Aspiration hazard 11.2 Information on other hazards 11.2.1 Endocrine disrupting properties 11.2.2. Information on other hazards SECTION 12: ECOLOGICAL INFORMAT 12.1 Toxicity Toxicity - Aquatic invertebrates Toxicity - Fish Toxicity - Algae Toxicity - Sediment Compartment 	ts No data available None known. TON No data available No data available

. No data available 12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

12.3 Bioaccumulative potential

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	Net In our
12.7 Other adverse effects	Not known.
	Not known.
SECTION 13: DISPOSAL CONSIDERATI	UNS
13.1 Waste treatment methods	Disease of contents in accordance with least state or estimat lexislation. Descela
	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	ON
IATA/IMO/RID/ADR	Not classified as hazardous for transport.
SECTION 15: REGULATORY INFORMAT	TION
European Regulations - Authorisations a Candidate List of Substances of Very High Concern for Authorisation REACH: ANNEX XIV list of substances subject to authorisation REACH: Annex XVII Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles Community Rolling Action Plan (CoRAP) Regulation (EC) N° 850/2004 of the European Parliament and of the Council on persistent organic pollutants Regulation (EC) N° 1005/2009 on substances that deplete the ozone layer Regulation (EU) N° 649/2012 of the European Parliament and of the Council concerning the export and import of hazardous chemicals	Not listed 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 LTEL : Long term exposure limit PBT : Persistent, Bioaccumulative and Toxic PNEC : Predicted No Effect Concentration REACH : Registration. Evaluation. Authorisation and Restriction of Chemicals



Disclaimers

UN : United Nations vPvB : very Persistent and very Bioaccumulative

Information contained in this publication or as otherwise supplied to Users is believed to be accurate and is given in good faith, but it is for the Users to satisfy themselves of the suitability of the product for their own particular purpose. Ossila Limited gives no warranty as to the fitness of the product for any particular purpose and any implied warranty or condition (statutory or otherwise) is excluded except to the extent that exclusion is prevented by law. Ossila Limited accepts no liability for loss or damage (other than that arising from death or personal injury caused by defective product, if proved), resulting from reliance on this information. Freedom under Patents, Copyright and Designs cannot be assumed.