

#### 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	PBBTSiD	
Synonyms	-	
Chemical Name	Poly[(4,7-bis(3-hexylthien-2-yl)- 2λ4δ2-benzo[1,2-c;4,5-c']bis[1,2,5] thiadiazole)-alt- (3,3'-bis(2-ethylhexylsilyene-2,2'-bithiophene)]	
Chemical Formula	(C50H64N4S6Si)n	
CAS No.	1334032-16-4	
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	

<b>_</b>	
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

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

Asia, India, and Oceania

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

+65 3163 8374

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	

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.



SECTION 5: FIREFIGHTING MEASURES	6
<ul> <li>5.1 Extinguishing media</li> <li>Suitable Extinguishing media</li> <li>Unsuitable extinguishing media</li> <li>5.2 Special hazards arising from the suitable</li> </ul>	
	Carbon oxides Nitrogen oxides (NOx) Sulfur oxides Silicon oxides
5.3 Advice for firefighters	Fire fighters should wear complete protective clothing including self-contained breathing apparatus.
SECTION 6: ACCIDENTAL RELEASE M	EASURES
6.1 Personal precautions, protective e	<b>quipment and emergency procedures</b> Follow safe handling advice and personal protective equipment recommendations (as per section 8). Provide adequate ventilation.
6.2 Environmental precautions	
6.3 Methods and material for containm	Avoid release to the environment.
	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-
Hygiene measures	ventilated area. Wear protective clothing as per section 8. Keep away from food and drink. Wash hands after handling, before breaks, and at the end of workday.
7.2 Conditions for safe storage, includ	ling any incompatibilities
Storage temperature	Store in a well-ventilated place. Keep container tightly closed. Ambient.
Storage life	Product is light sensitive. Store in the dark.
Incompatible materials 7.3 Specific end use(s)	None known.
	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	
8.2 Exposure controls	No Occupational Exposure Limit assigned.
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
Body protection	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.
Respiratory protection	No personal respiratory protection is necessary under normal circumstances.
Thermal hazards 8.2.3. Environmental Exposure Controls	None known. Avoid release to the environment.
SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES	
9.1 Information on basic physical and	abamical properties

9.1 Information on basic physical and chemical properties		
Physical State	Solid: Powder/Fibres.	
Colour	Dark Green.	
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.
Colubility (ICO)	Solubility (Other): Chlorobenzene, chloroform, toluene
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	
	Stable under recommended storage conditions.
10.3 Possibility of hazardous reaction	
	Not known.
10.4 Conditions to avoid	
	Not known.
10.5 Incompatible materials	Net line suine
	Not known.
10.6 Hazardous decomposition produ	
	In the event of fire: see Section 5.
SECTION 11: TOXICOLOGICAL INFORI	MATION
11.1 Information on toxicological effe	cts
<b>11.1 Information on toxicological effe</b> Acute toxicity - Ingestion	c <b>ts</b> No data available
Acute toxicity - Ingestion	
	No data available
Acute toxicity - Ingestion Acute toxicity - Skin Contact	No data available No data available
Acute toxicity - Ingestion Acute toxicity - Skin Contact Acute toxicity - Inhalation Skin corrosion/irritation	No data available No data available No data available
Acute toxicity - Ingestion Acute toxicity - Skin Contact Acute toxicity - Inhalation	No data available No data available No data available No data available
Acute toxicity - Ingestion Acute toxicity - Skin Contact Acute toxicity - Inhalation Skin corrosion/irritation Serious eye damage/irritation	No data available No data available No data available No data available No data available
Acute toxicity - Ingestion Acute toxicity - Skin Contact Acute toxicity - Inhalation Skin corrosion/irritation Serious eye damage/irritation Skin sensitization data	No data available No data available No data available No data available No data available No data available
Acute toxicity - Ingestion Acute toxicity - Skin Contact Acute toxicity - Inhalation Skin corrosion/irritation Serious eye damage/irritation Skin sensitization data Respiratory sensitization data	No data available No data available No data available No data available No data available No data available No data available
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	No data available No data available
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	No data available No data available
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	No data available No data available
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	No data available No data available
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	No data available No data available
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 <b>11.2 Information on other hazards</b>	No data available No data available
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	No data available No data available
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 <b>11.2 Information on other hazards</b> 11.2.1 Endocrine disrupting properties	No data available No data available
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 <b>11.2 Information on other hazards</b>	No data available No data available
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 <b>11.2 Information on other hazards</b> 11.2.1 Endocrine disrupting properties	No data available No data available
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 <b>11.2 Information on other hazards</b> 11.2.1 Endocrine disrupting properties 11.2.2. Information on other hazards	No data available No data available
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 <b>11.2 Information on other hazards</b> 11.2.1 Endocrine disrupting properties	No data available No data available
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 <b>11.2 Information on other hazards</b> 11.2.1 Endocrine disrupting properties 11.2.2. Information on other hazards	No data available No data available
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 <b>11.2 Information on other hazards</b> 11.2.1 Endocrine disrupting properties 11.2.2. Information on other hazards SECTION 12: ECOLOGICAL INFORMAT <b>12.1 Toxicity</b>	No data available No me known.
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 <b>11.2 Information on other hazards</b> 11.2.1 Endocrine disrupting properties 11.2.2. Information on other hazards SECTION 12: ECOLOGICAL INFORMAT <b>12.1 Toxicity</b> Toxicity - Aquatic invertebrates	No data available No data available None known. None known.
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 <b>11.2 Information on other hazards</b> 11.2.1 Endocrine disrupting properties 11.2.2. Information on other hazards SECTION 12: ECOLOGICAL INFORMAT <b>12.1 Toxicity</b> Toxicity - Aquatic invertebrates Toxicity - Fish	No data available
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 <b>11.2 Information on other hazards</b> 11.2.1 Endocrine disrupting properties 11.2.2. Information on other hazards SECTION 12: ECOLOGICAL INFORMAT <b>22.1 Toxicity</b> Toxicity - Aquatic invertebrates Toxicity - Fish Toxicity - Algae	No data available
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 <b>11.2 Information on other hazards</b> 11.2.1 Endocrine disrupting properties 11.2.2. Information on other hazards SECTION 12: ECOLOGICAL INFORMAT <b>2.1 Toxicity</b> Toxicity - Aquatic invertebrates Toxicity - Fish Toxicity - Fish Toxicity - Algae Toxicity - Sediment Compartment	No data available
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 <b>11.2 Information on other hazards</b> 11.2.1 Endocrine disrupting properties 11.2.2. Information on other hazards SECTION 12: ECOLOGICAL INFORMAT <b>2.1 Toxicity</b> Toxicity - Aquatic invertebrates Toxicity - Fish Toxicity - Fish Toxicity - Algae Toxicity - Sediment Compartment Toxicity - Terrestrial Compartment	No data available
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 <b>11.2 Information on other hazards</b> 11.2.1 Endocrine disrupting properties 11.2.2. Information on other hazards SECTION 12: ECOLOGICAL INFORMAT <b>2.1 Toxicity</b> Toxicity - Aquatic invertebrates Toxicity - Fish Toxicity - Fish Toxicity - Algae Toxicity - Sediment Compartment	No data available No ne known. None known.
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 <b>11.2 Information on other hazards</b> 11.2.1 Endocrine disrupting properties 11.2.2. Information on other hazards SECTION 12: ECOLOGICAL INFORMAT <b>2.1 Toxicity</b> Toxicity - Aquatic invertebrates Toxicity - Fish Toxicity - Fish Toxicity - Algae Toxicity - Sediment Compartment Toxicity - Terrestrial Compartment	No data available

12.4 Mobility in soil

No data available

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	Net In our
12.7 Other adverse effects	Not known.
	Not known.
SECTION 13: DISPOSAL CONSIDERATI	UN5
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.