

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

**SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**
**1.1 Product identifier**

 Product Name HTL Solar 4 PEDOT Complex  
 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)

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

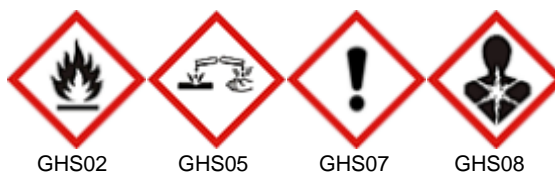
**SECTION 2: HAZARDS IDENTIFICATION**
**2.1 Classification of the substance or mixture**

 Regulation (EC) No. 1272/2008 (CLP) Flam. Liq. 3: Flammable liquid and vapour  
 Skin Irrit. 2: Causes skin irritation  
 Eye Dam. 1: Causes serious eye damage  
 STOT SE 3: May cause respiratory irritation  
 STOT SE 3: May cause drowsiness or dizziness  
 STOT RE 2: May cause damage to organs through prolonged or repeated exposure

**2.2 Label elements**

 According to Regulation (EC) No. 1272/2008 (CLP)  
 Product Name HTL Solar 4 PEDOT Complex

Hazard Pictogram(s)



Signal Word(s)

Danger

Hazard Statement(s)

 H226: Flammable liquid and vapour  
 H315: Causes skin irritation  
 H318: Causes serious eye damage  
 H335: May cause respiratory irritation  
 H336: May cause drowsiness or dizziness.  
 H373: May cause damage to organs (Lungs) through prolonged or repeated exposure

Precautionary Statement(s)

 P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
 P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.  
 P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell.  
 P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/ doctor.

**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.

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**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**


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**3.1 Substances**

This product is a mixture.

**3.2 Mixtures**

Hazardous ingredient(s)	CAS No.	EC No.	%W/W	Hazard Statement(s)
Anisole	100-66-3	202-876-1	>88.8 - <95.7	Flam. Liq. 3 H226 STOT SE 3 H336
Benzoic acid Index number: 607-705-00-8	65-85-0	200-618-2	≥ 1 - <5	STOT RE 1 (Lungs) H372 Skin Irrit. 2 H315 Eye Dam. 1 H318
Butylamine Index number: 612-005-00-0	109-73-9	203-699-2	≥ 0.1 - <3	Flam. Liq. 2 H225 Acute Tox. 4 H302 Acute Tox. 4 H312 Acute Tox. 4 H332 Skin Corr. 1A H314

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**SECTION 4: FIRST AID MEASURES**


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**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. Get medical advice/attention if you feel unwell.
Eye Contact	Flush with copious amounts of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a POISON CENTER or doctor/physician.
Ingestion	Immediately call a POISON CENTER or doctor/ physician. Rinse mouth. Do NOT induce vomiting.

**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.

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**SECTION 5: FIREFIGHTING MEASURES**


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**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  
Nitrogen oxides (NOx)

**5.3 Advice for firefighters**

Fire fighters should wear complete protective clothing including self-contained breathing apparatus.

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**SECTION 6: ACCIDENTAL RELEASE MEASURES**


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**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**

Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13).

**6.4 Reference to other sections**

See Also Section 8, 13.

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**SECTION 7: HANDLING AND STORAGE**


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**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. Store locked up. Reseal containers that have been opened to prevent evaporation of solvent and potential formation of a non re-dispersible solid. Keep upright to prevent leakage. Keep away from heat and sources of ignition.

Storage temperature 3-5 °C

Storage life Stable for 9 months from date of production in sealed original containers. Product is sensitive to frost and must not be stored at temperatures below 0 °C.

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

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**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**


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**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 Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls

**Thermal hazards**

8.2.3. Environmental Exposure Controls None known.  
 Avoid release to the environment.

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**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**


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**9.1 Information on basic physical and chemical properties**

Physical State Liquid.

Colour Dark Blue.

Odour Not known.

Odour threshold Not known.

Melting point/freezing point Not known

Initial boiling point and boiling range 154 °C

Flammability Not known.

Lower and upper explosion limit Not known.

Flash Point 41 °C(1,013 hPa).

Auto-ignition temperature (°C) Not known.

Decomposition temperature (°C) Not known.

pH 5 – 7 (21 °C).

Kinematic viscosity Not known.

Solubility(ies) Solubility (Water): Not known.  
 Solubility (Other): Not known.

Partition coefficient: n-octanol/water (log value) 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.

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**SECTION 10: STABILITY AND REACTIVITY**


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<b>10.1 Reactivity</b>	None anticipated.
<b>10.2 Chemical Stability</b>	Stable under recommended storage conditions.
<b>10.3 Possibility of hazardous reactions</b>	Not known.
<b>10.4 Conditions to avoid</b>	Not known.
<b>10.5 Incompatible materials</b>	Not known.
<b>10.6 Hazardous decomposition products</b>	In the event of fire: see Section 5

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**SECTION 11: TOXICOLOGICAL INFORMATION**


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**11.1 Information on toxicological effects**

Acute toxicity - Ingestion	> 2,000 mg/kg (Method: calculation method)
Acute toxicity - Skin Contact	Acute toxicity estimate: > 20 mg/l Exposure time: 4 h
	Test atmosphere: vapour (Method: Calculation method)
Acute toxicity - Inhalation	> 2,000 mg/kg (Method: calculation method)
Skin corrosion/irritation	Causes skin irritation.
Serious eye damage/irritation	Cause serious eye damage.
Skin sensitization data	Not classified.
Respiratory sensitization data	Not classified.
Germ cell mutagenicity	Not classified.
Carcinogenicity	Not classified.
Reproductive toxicity	Not classified.
Lactation	Not classified.
STOT - single exposure	May cause drowsiness or dizziness.
STOT - repeated exposure	May cause damage to organs (Lungs) through prolonged or repeated exposure if inhaled.
Aspiration hazard	Not classified.

**11.2 Information on other hazards**

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

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**SECTION 12: ECOLOGICAL INFORMATION**


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**12.1 Toxicity**

Toxicity - Aquatic invertebrates	Not classified. Benzoic acid – EC50 (Daphnia magna (Water flea)): > 100 mg/l. Butylamine – EC50 (Ceriodaphnia dubia (water flea)): 8.2 mg/l.
Toxicity - Fish	Benzoic acid – LC50 (Lepomis macrochirus (Bluegill sunfish)): 44.6 mg/l. Butylamine – LC50 (Lepomis macrochirus (Bluegill sunfish)): 32 mg/l.
Toxicity - Algae	Benzoic acid – ErC50 (Pseudokirchneriella subcapitata (green algae)): > 33.1 mg/l. Butylamine – EC50 (Desmodesmus subspicatus (green algae)): 17 mg/l
Toxicity - Sediment Compartment	Not known.
Toxicity - Terrestrial Compartment	Not known.

**12.2 Persistence and Degradation**

Benzoic acid – rapidly degradable. Biodegradation: 89.5 % Exposure time: 35 d.  
 Butylamine – readily biodegradable. Biodegradation: 85 % Exposure time: 14 d

**12.3 Bioaccumulative potential**

Not known.

**12.4 Mobility in soil**

Not known.

**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.

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**SECTION 13: DISPOSAL CONSIDERATIONS**


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**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, reclaimor or incinerator.

**13.2 Additional Information**

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

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**SECTION 14: TRANSPORT INFORMATION**


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**14.1 UN number**

UN No. 1993

**14.2 UN proper shipping name**

UN proper shipping name Flammable liquid, n.o.s. (Anisole dispersion)

**14.3 Transport hazard class(es)**

ADR/RID 3

IMDG 3

IATA 3

**14.4 Packing group**

Packing group II

**14.5 Environmental hazards**

Environmental hazards Classified as a Marine Pollutant (Anisole).

**14.6 Special precautions for user**

Special precautions for user Not known.

**14.7 Maritime transport in bulk according to IMO instruments**

Not known.

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**SECTION 15: REGULATORY INFORMATION**


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**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° 850/2004 of the European Parliament and of the Council on persistent organic pollutants Not listed

Regulation (EC) N° 1005/2009 on substances that deplete the ozone layer Not listed

Regulation (EU) N° 649/2012 of the European Parliament and of the Council concerning the export and import of hazardous chemicals Not listed

**National regulations**

Other Not known.

**15.2 Chemical Safety Assessment**

A REACH chemical safety assessment has not been carried out.

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**SECTION 16: OTHER INFORMATION**


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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  
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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