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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 Pentacene

Benzo[b]naphthacene, 2,3:6,7-Dibenzanthracene Synonyms

Chemical Name Pentacene Chemical Formula C22H14 CAS No. 135-48-8 EC No. 205-193-7 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

+44 (0) 20 3885 0382 (CHEMTREC) Emergency Phone #

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

Inhalation

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.

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.

Rinse out mouth with water. Get medical advice/attention if you feel unwell. Ingestion

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

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

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.

Keep away from food and drink. Wash hands after handling, before breaks, and at Hygiene measures

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/PERSONAL 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).

Handle with gloves. Gloves must be inspected prior to use and proper glove removal Hand protection

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

Physical State Solid: Powder/Crystals.

Colour Purple-Black. Odour Not known. Odour threshold Not known. Melting point/freezing point 372-374 °C (subl.) 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.

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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 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

No data available Acute toxicity - Ingestion 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 No data available Skin sensitization data Respiratory sensitization data No data available Germ cell mutagenicity No data available Carcinogenicity No data available Reproductive toxicity No data available No data available Lactation STOT - single exposure No data available STOT - repeated exposure No data available No data available Aspiration hazard

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties

None known.

11.2.2. Information on other hazards

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.

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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 Not listed

Candidate List of Substances of Very

High Concern for Authorisation

REACH: ANNEX XIV list of substances

subject to authorisation

Not listed

REACH: Annex XVII Restrictions on the

Not listed

manufacture, placing on the market and use of certain dangerous substances,

mixtures and articles

Community Rolling Action Plan (CoRAP) Not listed Regulation (EC) N° 850/2004 of the

Not listed

European Parliament and of the Council on persistent organic pollutants

Regulation (EC) N° 1005/2009 on

Not listed

substances that deplete the ozone layer Regulation (EU) N° 649/2012 of the

Not listed

European Parliament and of the Council concerning the export and import of

hazardous chemicals

National regulations

Other 15.2 Chemical Safety Assessment Not known.

A REACH chemical safety assessment has not been carried out.

SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements:

LEGEND

ADN: European Agreement concerning the International Carriage of Dangerous Acronyms

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

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vPvB : very Persistent and very Bioaccumulative

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