

# MATERIAL SAFETY DATA SHEET

## [6,6]-Phenyl C71 butyric acid methyl ester (PCBM)



### Product Details

Product Code: PCBM-01  
Name: [6,6]-Phenyl C71 butyric acid methyl ester (PCBM)  
Supplied by: Ossila Limited, Kroto Innovation Centre  
Broad Lane, Sheffield  
S3 7HQ, UK  
Contact: 0114 2132770  
info@ossila.com

### Main Hazards

Defined as non-hazardous under European directive 67/548/EEC but substance not yet fully tested. As precautionary measure consider to be irritant to eyes, skin and respiratory system.

### Ingredients

Ingredient	CAS #
1-[3-(methoxycarbonyl)propyl]-1-phenyl-[6.6]C71	CAS 609771-
3 <sup>1</sup> H-cyclopropa[1,9][5,6]fullerene-C70-Ih-3 <sup>1</sup> -butanoic acid 3 <sup>1</sup> -phenyl methyl	63-3

### Handling and Storage

#### Handling

Directions for Safe Handling: Do not breathe dust. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.

#### Storage

Good industrial practice in housekeeping, and personal hygiene should be followed. Minimize dust. Keep container closed. Keep away from sources of ignition.

### First Aid Measures

#### After Inhalation

If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.

#### After Skin Contact

In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. Call a physician.

#### After Eye Contact

In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

### **After Ingestion**

If swallowed, wash out mouth with water

### **Fire Fighting**

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

### **Extinguishing media:**

Use agent most appropriate to extinguish fire. In case of fire, use water spray, dry chemical, carbon dioxide, or appropriate foam.

### **Special Risks**

Emits toxic fumes when burnt.

### **Explosion hazards:**

Negligible

### **Accidental Release Measures**

#### **Personal precaution procedures to be followed in case of leak or spill**

Wear respirator, goggles, rubber boots and heavy rubber gloves.

#### **Procedure(s) of personal precaution(s)**

Sweep up and place in container for proper disposal. Avoid raising dust. Ventilate room and wash spill area after.

### **Physical and Chemical Properties**

**Appearance:** black to light brown solid and/or crystals

**Odor:** none reported

**Chemical formula:** C<sub>82</sub>H<sub>14</sub>O<sub>2</sub>

**Molecular weight:** 1030

**Boiling point:** not determined

**Melting point:** not determined

**Solubility in water:** negligible

**Solubility:** soluble in toluene, xylenes, ortho-dichlorobenzene, chloroform

### **Stability and Reactivity**

Stable under normal temperatures and pressures

Incompatible materials: Strong oxidants

Hazardous decomposition products: Carbon monoxide, irritating and toxic fumes and gases, carbon dioxide

Hazardous polymerization: Will not occur

### **Exposure Controls / Personal Protection**

#### **Engineering Controls**

Safety shower and eye bath. Mechanical exhaust required.

#### **Personal Protective Equipment**

Eyes: wear chemical goggles

Skin: wear appropriate gloves to prevent skin exposure

Clothing: wear appropriate protective clothing to minimize contact with skin

Respirators: a respiratory protection program that meets OSHA's 29 CFR §1910.134 and ANSI Z88.2 requirements or European standard EN 149 must be followed whenever workplace conditions warrant a respirator's use.

**General Hygiene Measures**

Wash thoroughly after handling. Wash contaminated clothing before reuse.

**Signs and symptoms of exposure**

Unknown

**Disposal**

Contact a licensed professional waste disposal service to dispose of this material. Burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations.

**Transport**

Non-hazardous for road, air and sea transport.

IATA: not regulated as a hazardous material

IMO: not regulated as a hazardous material

RID/ADR: not regulated as a hazardous material

**Warranty**

This material is for research and development use only. The information provided here is based upon the available information from material suppliers but not warranted as complete and is provided only as a guide. Ossila Limited shall not be held responsible for any damage resulting from use or handling of this product.