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## MATERIAL SAFETY DATA SHEET

### SECTION 1 - IDENTIFICATION

**Product Name:** OctaPhenyl POSS®  
**Product Number:** MS0840  
**Synonyms:** Octaphenylsilsesquioxane  
**Chemical Name:** 1,3,5,7,9,11,13,15-Octaphenylpentacyclo[9.5.1.1<sup>3,9</sup>.1<sup>5,15</sup>.1<sup>7,13</sup>]octasiloxane  
**Chemical Family:** Silsesquioxane

### SECTION 2 – COMPOSITION/INGREDIENTS

**Ingredient Name:** 1,3,5,7,9,11,13,15-Octaphenylpentacyclo[9.5.1.1<sup>3,9</sup>.1<sup>5,15</sup>.1<sup>7,13</sup>]octasiloxane  
**CAS Number:** [5256-79-1]

### SECTION 3 – HEALTH AND RELATED DATA

**Emergency Overview:** Inert solid, generally considered to be non-toxic.  
**Relevant Routes of Exposure:** Ingestion, skin or eye contact.  
**Eye Contact:** Prolonged exposure or repeated contact could cause irritation.  
**Skin Contact:** Prolonged exposure or repeated contact could cause irritation.  
**Inhalation:** Avoid breathing dust as it might cause irritation if exposure is prolonged or excessive.  
**Ingestion:** May cause irritation to mouth, throat, esophagus, and stomach.

#### **HMIS Rating:**

Health: 1                      Flammability: 0                      Reactivity: 0

#### **NFPA Rating:**

Health: 1                      Flammability: 0                      Reactivity: 0

### SECTION 4 – FIRST AID PROCEDURES

**Eyes:** In case of contact with eyes, flush with copious amounts of water for at least 15 min. Assure adequate flushing by separating the eyelids with fingers. Seek immediate medical attention.  
**Skin:** In case of contact, immediately wash skin with soap and copious amounts of water. Seek immediate medical attention if exposure is severe.  
**Inhalation:** If inhaled, remove to fresh air. If breathing becomes difficult call physician  
**Ingestion:** If swallowed, wash out mouth with water provided person is conscious. Seek immediate medical attention.

## **SECTION 5 – FIRE AND EXPLOSION HAZARD DATA**

**Autoignition Temperature:** N/A

**Extinguishing Media:** Carbon dioxide, dry chemical powder, or appropriate foam.

**Fire Fighting Instructions:** Fire fighters exposed to vapors should wear a self-contained breathing apparatus and full protective clothing to prevent contact with skin and eyes.

**Hazardous Combustion Products:** Carbon monoxide, carbon dioxide, and silicon oxide.

## **SECTION 6 – SPILL INFORMATION**

**Personal Precautions:** Exercise appropriate precautions to minimize direct contact with skin or eyes and prevent inhalation of dust.

**Methods for Cleaning Up:** Sweep up, place in bag and hold for disposal. Avoid raising dust. Ventilate area and wash spill site after material pick up is complete.

## **SECTION 7 – HANDLING AND STORAGE**

**Handling Precaution:** Handle in a fume hood or in properly ventilated area. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.

**Storage Precaution:** Ambient temperatures in tightly closed containers.

## **SECTION 8 – PRECAUTIONARY MEASURES/PPE**

**Engineering Controls:** Exhaust ventilation, safety shower and eye bath.

**Ventilation Requirements:** Mechanical exhaust required.

**Eye/Face Protection:** Chemical safety goggles or face shield.

**Skin Protection:** Protective gloves. Wash thoroughly after handling

**Respiratory Protection:** NIOSH approved respirator.

## **SECTION 9 – PHYSICAL/CHEMICAL APPEARANCE**

<b>Appearance:</b>	Solid Powder
<b>Melting Point:</b>	Decomposition at 434 °C
<b>Color:</b>	White
<b>Evaporation Rate:</b>	N/A
<b>Molecular/Chemical Formula:</b>	C <sub>48</sub> H <sub>40</sub> O <sub>12</sub> Si <sub>8</sub>
<b>Molecular Weight:</b>	1033.53 FW
<b>Odor:</b>	N/A
<b>Odor Threshold:</b>	N/A
<b>Reactivity in Water:</b>	Insoluble
<b>Solubility in Water:</b>	Insoluble
<b>Density:</b>	N/A
<b>Vapor Density:</b>	N/A

## **SECTION 10 – REACTIVITY**

<b>Stability:</b>	Stable
<b>Conditions to Avoid:</b>	Strong Bases
<b>Hazardous Decomposition Products:</b>	Carbon dioxide, Methane
<b>Hazardous Polymerization:</b>	Will not occur.

## **SECTION 11 – TOXICITY DATA**

### **Route of exposure:**

<b>Skin Contact:</b>	May cause irritation.
<b>Skin Absorption:</b>	May be harmful if absorbed through skin.
<b>Eye Contact:</b>	May cause eye irritation.
<b>Inhalation:</b>	May be harmful if inhaled. Material may be irritating to mucous membranes and upper respiratory tract.
<b>Ingestion:</b>	May be harmful if swallowed.

**Additional Information:** To the best of our knowledge the toxicological properties have not been thoroughly investigated.

## **SECTION 12 – ECOLOGICAL DATA**

**Ecological Information:** No data available.

## **SECTION 13 – DISPOSAL INFORMATION**

**Disposal Information:** Contact a licensed professional waste disposal service to dispose of this material. Disposal should be made in accordance with Federal, State and Local regulations.

## **SECTION 14 – TRANSPORTATION DATA**

### **DOT**

<b>Proper Shipping Name:</b>	None
<b>Non-Hazardous for Transport:</b>	This substance is considered to be non-hazardous for transport.

### **IATA**

<b>Non-Hazardous for Air Transport:</b>	This substance is considered to be non-hazardous for air transport.
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## **SECTION 15 – REGULATORY DATA**

**U.S. Federal Regulations:** This product is not currently regulated by SARA/EPCRA

**TSCA:** No. R&D Use Only

## **SECTION 16 – OTHER INFORMATION**

**Disclaimer:** For R&D use only. Not for drug, household or other uses.

Hybrid Plastics, Inc. has compiled the information and recommendations contained in this Material Safety Data Sheet from sources believed to be reliable and to represent the most reasonable current opinion on the subject when the MSDS was prepared. While the above information is believed to be accurate, no warranty, guaranty, or representation is made as to the correctness or sufficiency of the information and the information is intended only as a guide. Hybrid Plastics, Inc. shall not be held liable for any damage resulting from handling or from contact with this product. The user of this product must decide what safety measures are necessary to safely use this product, either alone or in combination with other products, and determine environmental regulatory compliance obligations under any applicable Federal or State Laws.