

# China Petrochemical Development Corporation


## Safety Data Sheet

110.06.08

### 1. IDENTIFICATION OF THE SUBSTANCE AND OF THE COMPANY

Product Name : OPPEOF
Other Name : 9,9-Bis[4-(2-hydroxyethoxy)-3-phenylphenyl]fluorene
Relevant identified uses of the substance or mixture and uses advised against : Raw material for resin and other chemicals, UV Coatings, Inks, Adhesives, Photoresists
Details of the Supplier : Name : China Petrochemical Development Corporation (CPDC) Research and Development Department Address : No. 1, Jingjian Rd., Dashe Dist., Kaohsiung City 815, Taiwan (R.O.C.) Phone Number : 886-7-3918118 Fax Number : 886-7-3918100
Emergency Phone Number : Phone Number : 886-7-3918118 Fax Number : 886-7-3918100

### 2. HAZARDS IDENTIFICATION

Classification : Acute toxicity, Oral (Category 4) Specific target organ toxicity (single exposure) (narcotic effects) - Category 3
 Label elements : Signal word : Warning Hazard substance : 9,9-Bis[4-(2-hydroxyethoxy)-3-phenylphenyl]fluorene Hazard statement(s) : Harmful if swallowed Harmful if inhaled Precautionary statement(s) : Wear protective gloves Wear eye / face protection In case of contact with eyes, rinse immediately with plenty of water and seek medical advice
Other hazards : -

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### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance :

Name : 9, 9-Bis[3-phenyl-4-(2-hydroxyethoxy)phenyl]fluorene
Synonyms : OPPEOF ; 9, 9-Bis[3-phenyl-4-(2-hydroxyethoxy)phenyl]fluorene
CAS No. : 156326-38-4
Hazardous Components (Percentage Composition) : >99%

### 4. FIRST AID MEASURES

First Aid Measures of Different Exposure Routes :
Inhaled : If overcome by exposure , remove victim to fresh air immediately . Give oxygen or artificial respiration as needed. Obtain emergency medical attention . Prompt action is essential.
Skin contact : Remove contaminated clothing as needed .wash skin thoroughly with mild soap/water.Flush with lukewarm water for 15 minutes.If sticky,use waterless cleaner first.
Eyes contact : In case of eye contact, immediately rinse with clean water for 20-30minutes. Retract eyelids often. Obtain emergency medical attention if pain , blinking.tears or redness persist.
Ingestion : If large quantity swallowed, give lukewarm water (pint) if victim completely conscious / alert. Do not induce vomiting / risk of damage to lungs exceeds poisoning risk . Obtain emergency medical attention.
The most important symptoms and hazardous effects : Skin sensitization hazard.
The protection of first-aiders :
Wear C class protective equipment and first aid in safety area.
Notes to physicians : Skin sensitization hazard. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled .

### 5. FIREFIGHTING MEASURES

Suitable extinguishing media : Foam, carbon dioxide or dry chemical.
Specific hazards may be encountered during firefighting : Flammable dust and vapor. In a fire or if heated, a pressure increase will occur and the container may burst , with the risk of a subsequent explosion.
Specific fire-fighting methods :
Full protective equipment, including self contained breathing apparatus is needed to protect fire fighters from exposure.
Special equipment / instructions for the protection of firefighters :
Chemical splash goggles and/or face shield, respiratory protection equipment, protective gloves, apron, boot.

### 6. ACCIDENTAL RELEASE MEASURES

Personal precautions : Wear proper protective equipment , avoid raw material contact and vapor inhalation .
Environmental precautions :
1. Extinguish all ignition sources and ventilate area.
2. Dispose/report per regulatory requirements.
Clean-up procedures :
1. Avoid contact spilled or released material
2. Reduce spill or release in safety condition .
3. Soak up small spill with inert solids (such as vermiculite, clay) and sweep/shovel into vented disposal container.
4. Dike and recover large spill. Obtain emergency help by fire or emergency unit .

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### 7. Safe Handling and Storage Measures

<p>Handling procedures :</p> <p>Put on appropriate personal protective equipment . Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use . Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue can be hazardous . Do not reuse container.</p>
<p>Storage procedures :</p> <p>Store in accordance with local regulations.Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry,cool and well-ventilated area, away from incompatible materials and food and drink . Store locked up. Eliminate all ignition sources. Separate from oxidizing materials . Keep container tightly closed and sealed until ready for use.Containers that have been opened must be carefully resealed and kept upright to prevent leakage.Do not store in unlabeled containers.Use appropriate containment to avoid environmental contamination.</p>

### 8. Exposure Controls Measures

Engineering controls : -			
Control parameters			
Permissible Exposure Level TWA of 8 hour	Permissible Exposure Level STEL	Permissible Exposure Level Ceiling	Biological Exposure Indices BEIs
—	—	—	—
<p>Personal protective equipment :</p> <p>Respiratory protection :</p> <p>If this material is handled at elevated temperature or under mist forming conditions ,NIOSH/MSHA approved respiratory protection equipment should be used .</p> <p>Hand protection :</p> <p>Do not use natural rubber gloves. Products without solvents added: wear nitrile gloves. Products used with solvents: wear thick (&gt;0.5 mm) nitrile gloves. Replace gloves immediately when torn or any change in appearance (dimension,color, flexibility, etc) is noticed.</p> <p>Eye protection :</p> <p>Eye protection such as chemical splash goggles and /or face shield must be worn when possibility exists for eye contact due to splashing or spraying liquid , airborne particles, or vapor. Contact lenses should not be worn.</p> <p>Skin and body protection :</p> <p>Depending on the conditions of use, protective gloves, apron, boots, head and face protection should be worn. This equipment should be cleaned thoroughly after each use.</p>			
<p>Hygiene measures :</p> <ol style="list-style-type: none"> <li>1. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.</li> <li>2. Use good personal hygiene practices. Wash hands before eating, drinking, smoking, or using toilet facilities.</li> <li>3. Promptly remove soiled clothing/wash thoroughly before reuse. Shower after work using plenty of soap and water.</li> </ol>			

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### 9. Physical and Chemical Properties

Appearance (physical state, colour, etc) : White powder	Odor : —
Odor threshold : —	Melting point : 145-147°C
pH value : —	Boiling point or boiling range : 255 °C(760mmHg)
Flammability (solid, gas) : /	Flash point : —
Decomposition temperature : —	Test method ( Open cup or Closed cup ) : —
Auto-ignition temperature : —	Explosion range : —
Vapor pressure : —	Vapor density : —
Density : —	Solubility : Insoluble in water
Octanol-Water partition coefficient (logKow) : —	Evaporation rate : —

### 10. Chemical Stability and Reactivity Information

Chemical Stability : Stable under ordinary conditions of use and storage .
Possibility of Hazardous Reactions : -
Conditions to Avoid : High temperatures, localized heat sources (i.e., drum or band heaters), oxidizing conditions.
Incompatible Materials : Heat, flame, strong oxidizers, nitric and sulfuric acids.
Hazardous Decomposition Products : Carbon dioxide and carbon monoxide.

### 11. TOXICOLOGICAL INFORMATION

Exposure Routes : Skin, inhalation, ingestion, eyes.
Symptoms Inhalation : No significant signs or symptoms indicative of any adverse health hazard are expected to occur at standard conditions due to the low volatility of this material . However, aerosols, or vapors which may be generated at elevated processing temperatures , may cause respiratory tract irritation.Symptoms of irritation may include coughing , mucous production and shortness of breath. Skin contact : Although no appropriate human or animal health effects data are known to exist , this material is expected to be a skin irritant . Symptoms may include localized redness or rash and swelling of the affected area. Symptoms may be delayed. A more severe skin response may occur after prolonged contact with this material . Although no appropriate human or animal health effects data is known to exist ,this material may cause an allergic skin reaction (sensitization) in susceptible individuals upon repeated exposure. Eye contact : Although no appropriate human or animal health effects data are known to exist , this material is expected to cause eye irritation with symptoms including burning sensation , tearing, redness or swelling. Ingestion : Although no appropriate human or animal health effects data are known to exist , this material is expected to be a slight ingestion hazard .
Acute Toxicity : —
Chronic Toxic Effects : —

### 12. ECOLOGICAL INFORMATION

Ecological Toxicity : —
Persistence and Degradability : —
Bio-accumulative Potentia : —

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Mobility in soil : —
Other Adverse Effects : —

### 13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods : 1. Refer to the relevant laws and regulations for disposal . 2. Store the waste to be disposed depending on the storage conditions . 3. May be disposed by special incineration or sanitary landfill .
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### 14. TRANSPORT INFORMATION

UN Number : /
UN Proper Shipping Name : /
Transport hazard class : /
Packaging Group : —
Marine Pollutant : No
Special precautions for users and transporters : —

### 15. REGULATORY INFORMATION

Applicable regulations : This product is not listed on TSCA Inventory This product is not listed on Elincs Inventory
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### 16. OTHER INFORMATION

Reference documents		
SDS prepared by	Organization name : China Petrochemical Development Corporation (CPDC) Research and Development Department Address : No. 1, Jingjian Rd., Dashe Dist., Kaohsiung City 815, Taiwan (R.O.C.) Telephone : +886-7-3918118	
	Title : Specialist	Name (signature) : CHEN YU SEN
Date	<b>110.06.08</b>	
Remark	“ — “ = not available ; “ / “ = not applicable	