

# SAFETY DATA SHEET

according to GB/T 16483 and GB/T 17519

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product identifier**

Product name : 9,9-Bis(4-amino-3-chlorophenyl)fluorene  
CAS No. : 107934-68-9

**Manufacturer or supplier's details**

Company : Heynova (Shanghai) New Material Technology CO., Ltd  
Address : Building 3, No. 690 Bibo Road, Pudong New Area, Shanghai, China  
Telephone : +86-178-2110-2608  
E-mail address : info@heynovachem.com

## 2. HAZARDS IDENTIFICATION

**Emergency Overview**

**Appearance** : Solid form  
**Color** : white - orange

Toxic to aquatic life with long lasting effects.

**GHS Classification**

Short-term (acute) aquatic hazard : Category 2

Long-term (chronic) aquatic hazard : Category 2

**GHS label elements**

Hazard pictograms :



Signal Word : None

Hazard Statements : H411 Toxic to aquatic life with long lasting effects.

Precautionary Statements :

**Prevention:**

P273 Avoid release to the environment.

**Response:**

P391 Collect spillage.

**Disposal:**

P501 Dispose of contents/ container to an approved waste disposal plant.

**Physical and chemical hazards**

Not classified based on available information.

**Health hazards**

Not classified based on available information.

**Environmental hazards**

Toxic to aquatic life. Toxic to aquatic life with long lasting effects.

**Other hazards which do not result in classification**

None known.

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**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Substance / Mixture : Substance

**Components**

| Chemical name                           | CAS RN      | Concentration (% w/w) |
|-----------------------------------------|-------------|-----------------------|
| 9,9-Bis(4-amino-3-chlorophenyl)fluorene | 107934-68-9 | 98                    |

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**4. FIRST AID MEASURES**

- If inhaled : Remove person to fresh air and keep comfortable for breathing.  
Get medical advice/ attention if you feel unwell.
- In case of skin contact : Take off all contaminated clothing immediately.  
If on skin, rinse well with water.  
If skin irritation or rash occurs: Get medical advice/ attention.
- In case of eye contact : Rinse with plenty of water.  
If easy to do, remove contact lens, if worn.  
If eye irritation persists: Get medical advice/ attention.
- If swallowed : Get medical advice/ attention.  
Rinse mouth.
- Most important symptoms and effects, both acute and delayed : None known.

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**5. FIRE-FIGHTING MEASURES**

- Suitable extinguishing media : Dry powder, Foam, Water spray, Carbon dioxide (CO<sub>2</sub>)
- Specific hazards during fire fighting : No information available.
- Specific extinguishing methods : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.  
Immediately evacuate personnel to safe areas.  
Remove undamaged containers from fire area if it is safe to do so.
- Special protective equipment for fire-fighters : Use personal protective equipment.

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**6. ACCIDENTAL RELEASE MEASURES**

- Personal precautions, protective equipment and emergency procedures : Wear suitable protective equipment.  
Keep people away from and upwind of spill/leak.  
Entry to non-involved personnel should be controlled around the leakage area by roping off, etc.
- Environmental precautions : Should not be released into the environment.
- Methods and materials for containment and cleaning up : Pick up and arrange disposal without creating dust.

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## 7. HANDLING AND STORAGE

### Handling

|                         |   |                                                                                                                                      |
|-------------------------|---|--------------------------------------------------------------------------------------------------------------------------------------|
| Technical measures      | : | Prevent dispersion of dust.                                                                                                          |
| Local/Total ventilation | : | Ensure adequate ventilation.<br>Use a local exhaust ventilation.                                                                     |
| Advice on safe handling | : | Avoid contact with skin, eyes and clothing.<br>Wear personal protective equipment.<br>Wash hands and face thoroughly after handling. |
| Avoidance of contact    | : | Oxidizing agents                                                                                                                     |

### Storage

|                             |   |                                                                    |
|-----------------------------|---|--------------------------------------------------------------------|
| Conditions for safe storage | : | Keep container tightly closed.<br>Store in a cool and shaded area. |
|-----------------------------|---|--------------------------------------------------------------------|

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## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Ingredients with workplace control parameters

Contains no substances with occupational exposure limit values.

|                      |   |                                                                                       |
|----------------------|---|---------------------------------------------------------------------------------------|
| Engineering measures | : | Install a closed system or local exhaust.<br>Also install safety shower and eye bath. |
|----------------------|---|---------------------------------------------------------------------------------------|

### Personal protective equipment

|                          |   |                               |
|--------------------------|---|-------------------------------|
| Respiratory protection   | : | Dust mask                     |
| Eye/face protection      | : | Safety glasses<br>Face-shield |
| Skin and body protection | : | Protective suit               |
| Hand protection          | : | Protective gloves             |

\*Use personal protective equipment(PPE) approved under appropriate government standards and follow local and national regulations.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

|                              |   |                   |
|------------------------------|---|-------------------|
| Appearance                   | : | solid             |
| Color                        | : | white - orange    |
| Odor                         | : | No data available |
| Odor Threshold               | : | No data available |
| pH                           | : | No data available |
| Melting point/freezing point | : | 200 °C            |
| Boiling point/boiling range  | : | No data available |
| Flash point                  | : | No data available |
| Evaporation rate             | : | No data available |
| Flammability                 | : | No data available |

|                                                  |   |                                         |
|--------------------------------------------------|---|-----------------------------------------|
| Upper explosion limit / Upper flammability limit | : | No data available                       |
| Lower explosion limit / Lower flammability limit | : | No data available                       |
| Vapor pressure                                   | : | No data available                       |
| Solubility(ies)                                  |   |                                         |
| Water solubility                                 | : | insoluble                               |
| Solubility in other solvents                     | : | soluble<br>Solvent: Tetrahydrofuran     |
|                                                  |   | slightly soluble<br>Solvent: Methanol   |
|                                                  |   | slightly soluble<br>Solvent: Chloroform |
| Partition coefficient: n-octanol/water           | : | No data available                       |
| Autoignition temperature                         | : | No data available                       |
| Decomposition temperature                        | : | No data available                       |
| Viscosity                                        |   |                                         |
| Viscosity, dynamic                               | : | No data available                       |
| Viscosity, kinematic                             | : | No data available                       |
| Molecular weight                                 | : | 417.33 g/mol                            |

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## 10. STABILITY AND REACTIVITY

|                                    |   |                                                                                                               |
|------------------------------------|---|---------------------------------------------------------------------------------------------------------------|
| Reactivity                         | : | No data available                                                                                             |
| Chemical stability                 | : | Stable under normal conditions.                                                                               |
| Possibility of hazardous reactions | : | None under normal processing.                                                                                 |
| Incompatible materials             | : | Oxidizing agents                                                                                              |
| Hazardous decomposition products   | : | Carbon monoxide, Carbon dioxide (CO <sub>2</sub> ), Nitrogen oxides (NO <sub>x</sub> ), Hydrogen chloride gas |

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## 11. TOXICOLOGICAL INFORMATION

|                                          |   |                           |
|------------------------------------------|---|---------------------------|
| <b>Acute toxicity</b>                    | : | No information available. |
| <b>Skin corrosion/irritation</b>         | : | No information available. |
| <b>Serious eye damage/eye irritation</b> | : | No information available. |
| <b>Respiratory or skin sensitization</b> | : | No information available. |
| <b>Germ cell mutagenicity</b>            | : | No information available. |
| <b>Carcinogenicity</b>                   | : | No information available. |
| <b>Reproductive toxicity</b>             | : | No information available. |
| <b>STOT-single exposure</b>              | : | No information available. |

**STOT-repeated exposure** : No information available.

**Repeated dose toxicity** : No information available.

**Aspiration toxicity** : No information available.

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## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

#### Product:

#### Ecotoxicology Assessment

Acute aquatic toxicity : Toxic to aquatic life.

Chronic aquatic toxicity : Toxic to aquatic life with long lasting effects.

#### Components:

#### 9,9-Bis(4-amino-3-chlorophenyl)fluorene:

#### Ecotoxicology Assessment

Acute aquatic toxicity : Toxic to aquatic life.

Chronic aquatic toxicity : Toxic to aquatic life with long lasting effects.

#### Persistence and degradability

No data available

#### Bioaccumulative potential

No data available

#### Mobility in soil

No data available

#### Other adverse effects

No data available

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## 13. DISPOSAL CONSIDERATIONS

### Disposal methods

Waste from residues : Disposal in accordance with local and national regulations.  
Entrust disposal to a licensed waste disposal company.

Contaminated packaging : Disposal in accordance with local and national regulations.  
Before disposal of used container, remove contents completely.

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## 14. TRANSPORT INFORMATION

### International Regulations

#### IATA-DGR

UN/ID No. : UN 3077

Proper shipping name : Environmentally hazardous substance, solid, n.o.s.

Class : 9

Packing group : III

#### IMDG-Code

UN number : UN 3077

Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.  
Class : 9  
Packing group : III  
EmS Code : F-A, S-F

**Domestic regulation****GB 6944/12268**

UN number : UN 3077  
Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.  
Class : 9  
Packing group : III

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**15. REGULATORY INFORMATION****Measures on the Environmental Administration of New Chemical Substances Registration**

Registration/Notification number : B1A232215453

Downstream users need to comply with the conditions of safe use of the chemical, understand the environmental and health hazard and risk management measures identified on the SDS as well as the local/national regulations concerning the chemical.

**The ingredients of this product are reported in the following inventories:**

CH BAGREG : Not in compliance with the inventory

TSCA : All substances listed as active on the TSCA inventory

AICS : On the inventory, or in compliance with the inventory

DSL : This product contains the following components that are not on the Canadian DSL nor NDSL.  
9,9-Bis(4-amino-3-chlorophenyl)fluorene

ENCS : Not in compliance with the inventory

ISHL : Not in compliance with the inventory

KECI : On the inventory, or in compliance with the inventory

PICCS : Not in compliance with the inventory

IECSC : Not in compliance with the inventory

NZIoC : Not in compliance with the inventory

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**16. OTHER INFORMATION**

Revision Date : 2024/11/02  
Date format : yyyy/mm/dd

**Disclaimer**

This SDS was prepared sincerely based on the information obtained, however, any warranty shall not be given regarding the data contained and the assessment of hazards and toxicity. Prior to use, please investigate not only the hazards and toxicity information but also the laws and regulations of the organization, area and country where the products are to be used, which shall be given the first priority. The products are supposed to be used promptly after purchase in consideration of safety. Some new information or amendments may be added afterwards. If the products are to be used far behind the expected time of use or you have any questions, please feel free to contact us. The stated cautions are for normal handling only. In case of special handling operations, sufficient care should be taken, in addition to the safety measures suitable for the given situation. All chemical products should be treated with the recognition of "having unknown hazards and toxicity", which differ greatly depending on the conditions and handling when in use and/or the

conditions and duration of storage. The products must be handled only by those who are familiar with specialized knowledge and have experience or under the guidance of those specialists throughout use from opening to storage and disposal. Safe usage conditions shall be set up on each user's own responsibility.