

# SAFETY DATA SHEET

## 1. Chemical product and company identification

**Product name** Panlite® BN-8110R  
**SDS Number** BN8110R-JpE  
**Version number** 03  
**Issue date** 04-01-2013  
**Revision date** 04-01-2017  
**Company name** TEIJIN Limited.  
**Address** 2-1, Kasumigaseki 3-chome, Chiyoda-ku, Tokyo 100-8585, Japan  
**Division** Environment Quality Assurance Department,  
Resin & Plastic Processing Business Unit  
**Telephone number** +81 3-3506-4717  
**Fax** +81 3-3580-6680

### Recommended use of the chemical and restrictions on use

**Intended use** Molding material for industry use

## 2. Hazards identification

**GHS-classification** The product is not classified according to GHS.  
**GHS label elements** None.  
**Precautionary statement** None.  
**National/local information** See section 15 for regulatory information.

## 3. Composition/information on ingredients

**Substance or Mixture** Mixture

| Components                               | CAS #       | Gazette notification |             |                   |
|------------------------------------------|-------------|----------------------|-------------|-------------------|
|                                          |             | ENCS no.             | ISHL no.    | Concentration (%) |
| Polycarbonate resin                      | 25971-63-5  | (7)-738              | (7)-738     | 80 – 90           |
| Carbon fiber                             | 7440-44-0   | Exempted             | Exempted    | =< 10             |
| Tetrabromobisphenol-A carbonate oligomer | Proprietary | Proprietary          | Proprietary | =< 10             |

**Chemical formula:** (C15H16O2.CCl2O)x (25971-63-5), C (7440-44-0)

## 4. First aid measures

**If inhaled** In case of inhalation of dusts or fumes from heated product: Move injured person into fresh air and keep person calm under observation. Get medical attention if any discomfort continues.

**If on skin** Rinse with water. Get medical attention promptly if symptoms persist or occur after washing. If burned by contact with hot material, cool molten material adhering to skin as quickly as possible with water, and see a physician for removal of adhering material and treatment of burn.

**If in eyes** Dust in the eyes: Do not rub eyes. Flush thoroughly with water. If irritation occurs, get medical assistance.

**If swallowed** Rinse mouth thoroughly. Large quantities: Get medical attention if symptoms occur.

**Expected acute and delayed Symptoms** None.

**Protection of first-aid responders** First aid personnel must be aware of own risk during rescue.

**Notes to physician** Treat symptomatically.

## 5. Fire-fighting measures

**Extinguishing media** Extinguish with foam, carbon dioxide, dry powder or water fog.

**Extinguishing media to avoid** None.

**Specific hazards** During fire, gases hazardous to health may be formed.

**Special fire fighting procedures** Use standard firefighting procedures and consider the hazards of other involved materials.

**Protection of fire-fighters** Selection of respiratory protection for fire fighting: follow the general fire precautions

indicated in the workplace.

## 6. Accidental release measures

|                                                                          |                                                                                       |
|--------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| <b>Personal precautions, protective equipment and emergency measures</b> | Avoid inhalation of dust. See Section 8 of the SDS for Personal Protective Equipment. |
| <b>Environmental precautions</b>                                         | Do not allow to enter drains, sewers or watercourses.                                 |
| <b>Clean-up methods and materials and containment measures</b>           | Collect and dispose of spillage as indicated in Section 13 of the SDS.                |

## 7. Handling and storage

### Handling

|                                      |                                                                                                                                                                        |
|--------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Technical measures</b>            | Use explosion-proof electrical equipment if airborne dust levels are high.                                                                                             |
| <b>Local and general ventilation</b> | Provide adequate ventilation.                                                                                                                                          |
| <b>Precautions</b>                   | Use work methods which minimize dust production. Wear appropriate personal protective equipment.                                                                       |
| <b>Safe handling advice</b>          | Avoid inhalation of dust. Avoid prolonged or repeated contact with skin. Avoid vapors from heated materials to prevent exposure to potentially toxic/irritating fumes. |

### Storage

|                                    |                                                    |
|------------------------------------|----------------------------------------------------|
| <b>Technical measures</b>          | Avoid dust formation.                              |
| <b>Suitable storage conditions</b> | Store in closed original container in a dry place. |
| <b>Safe packaging materials</b>    | Keep in original container.                        |

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### Japan OELs - JSOH

| Components               | Type | Value                 | Form             |
|--------------------------|------|-----------------------|------------------|
| Carbon fiber (7440-44-0) | TWA  | 2 mg/m <sup>3</sup>   | Total dust.      |
|                          |      | 0.5 mg/m <sup>3</sup> | Respirable dust. |

#### ACGIH

| Components               | Type | Value               | Form                 |
|--------------------------|------|---------------------|----------------------|
| Carbon fiber (7440-44-0) | TWA  | 2 mg/m <sup>3</sup> | Respirable fraction. |

**Engineering measures** Provide adequate ventilation. Observe occupational exposure limits and minimize the risk of inhalation of dust and fumes.

### Personal protective equipment

|                                 |                                                                                                                                             |
|---------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Respiratory protection</b>   | Wear respirator if there is dust formation. When the product is heated, use suitable respiratory equipment with gas filter for organic gas. |
| <b>Hand protection</b>          | Wear protective gloves. When material is heated, wear gloves to protect against thermal burns.                                              |
| <b>Eye protection</b>           | Use tight fitting goggles if dust is generated. If contact with hot material may occur, safety glasses and face shield are recommended.     |
| <b>Skin and body protection</b> | Wear suitable protective clothing.                                                                                                          |

**Hygiene measures** Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

## 9. Physical and chemical properties

### Appearance

|                       |          |
|-----------------------|----------|
| <b>Physical state</b> | Solid.   |
| <b>Form</b>           | Pellets. |
| <b>Color</b>          | Natural. |

### Odor

None.

### pH

Not applicable.

### Melting point/Freezing point

> 464 °F (> 240 °C)

### Boiling point, initial boiling point, and boiling range

Not applicable.

### Flash point

> 971.6 °F (> 522 °C)

### Auto-ignition temperature

> 1022 °F (> 550 °C)

|                                                |                    |
|------------------------------------------------|--------------------|
| <b>Combustion characteristics (solid, gas)</b> | Not available.     |
| <b>Flammability limit - lower (%)</b>          | Not available.     |
| <b>Flammability limit - upper (%)</b>          | Not available.     |
| <b>Vapor pressure</b>                          | Not applicable.    |
| <b>Vapor density</b>                           | Not applicable.    |
| <b>Specific gravity</b>                        | 1.26               |
| <b>Solubility</b>                              | Insoluble in water |
| <b>Partition coefficient (n-octanol/water)</b> | Not available.     |
| <b>Decomposition temperature</b>               | Not available.     |

## 10. Stability and reactivity

|                                           |                                                                       |
|-------------------------------------------|-----------------------------------------------------------------------|
| <b>Stability</b>                          | Stable under normal temperature conditions.                           |
| <b>Possibility of hazardous reactions</b> | Will not occur.                                                       |
| <b>Conditions to avoid</b>                | None known.                                                           |
| <b>Incompatible materials</b>             | No data available.                                                    |
| <b>Hazardous decomposition products</b>   | During combustion: Carbon monoxide. Carbon Dioxide. Hydrogen bromide. |

## 11. Toxicological information

|                       |                                    |
|-----------------------|------------------------------------|
| <b>Acute toxicity</b> | May cause discomfort if swallowed. |
|-----------------------|------------------------------------|

| Components                                                | Test Results                                                                       |
|-----------------------------------------------------------|------------------------------------------------------------------------------------|
| Carbon fiber (7440-44-0)                                  | Acute Oral LD50 Rat: > 10000 mg/kg                                                 |
| <b>Skin corrosion/irritation</b>                          | Dust may irritate skin.                                                            |
| <b>Serious eye damage/eye irritation</b>                  | Dust in the eyes will cause irritation. May cause redness and pain.                |
| <b>Respiratory sensitizer</b>                             | None known.                                                                        |
| <b>Skin sensitizer</b>                                    | None known.                                                                        |
| <b>Germ cell mutagenicity</b>                             | None known.                                                                        |
| <b>Carcinogenicity</b>                                    | The product contains a small amount substance that is suspected of causing cancer. |
| <b>Toxic to reproduction</b>                              | None known.                                                                        |
| <b>Specific target organ toxicity - single exposure</b>   | None known.                                                                        |
| <b>Specific target organ toxicity - repeated exposure</b> | None known.                                                                        |

## 12. Ecological information

|                                  |                                                                                                                                                                                                                |
|----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Ecotoxicity</b>               | The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment. |
| <b>Persistence/degradability</b> | None known.                                                                                                                                                                                                    |
| <b>Bioaccumulation</b>           | None known.                                                                                                                                                                                                    |
| <b>Mobility in soil</b>          | The product is insoluble in water and will sediment in water systems.                                                                                                                                          |
| <b>Other hazardous effects</b>   | None known.                                                                                                                                                                                                    |

## 13. Disposal considerations

|                               |                                                                                                                                                                                                                                                                                                                |
|-------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Residual waste</b>         | Dispose of waste at a facility with special permission to dispose industrial wastes. Waste should be accompanied by a manifest for the industrial waste. Dispose of in accordance with local regulations. Do not discharge into rivers, lakes, mountains, etc. because the product may affect the environment. |
| <b>Contaminated packaging</b> | Since emptied containers may retain product residue, follow label warnings even after container is emptied.                                                                                                                                                                                                    |

## 14. Transport information

|                                       |               |                                                |
|---------------------------------------|---------------|------------------------------------------------|
| Company name: TEIJIN Limited.<br>2578 | Version #: 03 | Panlite® BN-8110R<br>Revision date: 2017/04/01 |
|---------------------------------------|---------------|------------------------------------------------|

|                                  |                                                           |
|----------------------------------|-----------------------------------------------------------|
| <b>International regulations</b> | Not regulated as dangerous under UN transport regulation. |
| <b>IATA</b>                      | Not regulated as dangerous goods.                         |
| <b>IMDG</b>                      | Not regulated as dangerous goods.                         |

## 15. Regulatory information

### Industrial Safety and Health Act

|                                        |                |
|----------------------------------------|----------------|
| <b>Specified substances regulation</b> | Not regulated. |
| <b>Organic solvents regulation</b>     | Not regulated. |
| <b>Notifiable substances</b>           | Not regulated. |
| <b>Labeling substances</b>             | Not regulated. |

**Poisonous and Deleterious Substances Control Act** Not regulated.

### Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc.

|                                               |                |
|-----------------------------------------------|----------------|
| <b>Class I specified chemical substances</b>  | Not regulated. |
| <b>Class II specified chemical substances</b> | Not regulated. |
| <b>Monitoring chemical substances</b>         | Not regulated. |

### Law concerning Pollutant Release and Transfer Register

**Specified class 1 substances (substance name, ordinance number and content)**

Not regulated.

**Class 1 substances (substance name, ordinance number and content)**

Not regulated.

**Class 2 substances (substance name, ordinance number and content)**

Not regulated.

**Fire Service Act** Not dangerous goods under Fire Service Law

### Ship Safety Law, Dangerous Goods Marine Transport and Storage Rule

Not regulated.

**Air Law, Enforcement Rule** Not regulated.

**Explosives Control Act** Not regulated.

**High Pressure Gas Safety Act** Not regulated.

### Act on Prevention of Marine Pollution and Maritime Disaster

Not regulated.

## 16. Other information

The information about colorant is not contained in this SDS.

This information is provided without warranty. The information is believed to be correct. The precautions in this SDS are intended for normal use. Please take safety measures appropriate to the use and the application when handling the product in a special way. This information should be used to make an independent determination of the methods to safeguard workers and the environment.