Safety Data Sheet (SDS)

Preparation Date  2012/05/16
Revision Date  2014/05/09

Section 1 - CHEMICALS AND COMPANY IDENTIFICATION

Chemical Identifier  EPOLEAD PB4700[EPL PB4700]
Product Code  ODP−OH−EPLPB4700−01
Reference Number  yuuki311−7
Company Name  DAICEL CORPORATION
Address  2−18−1, Konan, Minato−ku, Tokyo 108−8230, Japan
Company Contact  Organic Chemical Products Company
Phone Number  +81−3−6711−8211
Fax Number  +81−3−6711−8218
Emergency Phone  Organic Chemical Products Company
Number  +81−3−6711−8211
Recommended Use and Restriction on Use  general industrial
ID  EPLPB4700_E03

Section 2 - HAZARDS IDENTIFICATION

GHS Classification
Physicochemical Hazards  Flammable liquids Out of category
Pyrophoric liquids Out of category
Health Hazards  Acute toxicity − oral Out of category
Skin corrosion/irritation Out of category
Sensitization − skin Out of category
Other hazards than mentioned above are Not applicable or No data available.

Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

Distinction of Substance or Mixture  substance
Chemical name or generic name  Polybutadiene Epoxydized

<table>
<thead>
<tr>
<th>Chemical Name or Generic Name</th>
<th>Concentration or Its Ranges</th>
<th>Formula</th>
<th>CAS RN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polybutadiene Epoxydized</td>
<td>≥ 99%</td>
<td>—</td>
<td>71342−74−0</td>
</tr>
</tbody>
</table>

Impurities and/or Stabilizing Additives which Contribute to the Classification  No information available

Section 4 - FIRST AID MEASURES

Inhalation  Remove person to fresh air and keep comfortable for breathing.
Immediately call a doctor.
Get medical advice and attention if you feel unwell.

Skin Contact  Take off contaminated clothing and wash it before reuse.
Wash with soap and water.
Immediately call a doctor.
**Eye Contact**

If skin irritation or rash occurs, get medical advice and attention.

- Rinse cautiously with water for several minutes.
- Remove contact lenses, if present and easy to do.
- Continue rinsing.
- Immediately call a doctor.
- Get medical advice and attention.

**Ingestion**

Rinse mouth. Do NOT induce vomiting.

- Immediately call a doctor.
- Get medical advice and attention.

## Section 5 – FIRE FIGHTING MEASURES

### Extinguishing Media

- **Small fires:** Dry chemical, dry sand, alcohol-resistant foam.
- **Large fire:** Dry chemicals, alcohol-resistance foam extinguishing agents and water sprinkling.

### Unsuitable Extinguishing Media

- Straight streams.

### Specific Hazards

- Flammable and combustible material.
- May be ignited by heat, sparks or flames.

### Specific Fire Fighting

- Use extinguishing agent suitable for type of surrounding fire.
- Move containers from fire area if you can do it without risk.

### Protection of Fire Fighter

- In fire fighting, wear respiratory protection and chemical protective clothing.

## Section 6 – ACCIDENTAL RELEASE MEASURES

### Personal Precautions, Protective Equipment and Emergency Procedures

- Keep unauthorized personnel away.
- Wear appropriate personal protective equipment (Refer to “Section 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION”) and avoid inhalation or contact with eyes and skin.
- Isolate the site as a leak area by providing a zone that has an appropriate width to all directions.
- Keep out of low areas.
- Stay upwind.
- Do not touch or walk through spilled material.
- Pay attention not to cause the influence on the environment by discharging into rivers.
- Stop leak if you can do it without risk.

### Environmental Precautions

- All equipment used when handling the product must be grounded.
- Small spills; absorb or cover with dry earth, sand or other non-combustible material and transfer to containers for later disposal.
- Small spills; Use clean non-sparking tools to collect absorbed material.
- Large spills; prevent flowing out with a dike and collect it at a safe place.

### Methods and Equipment for Containment and Cleaning up

- Removes all ignition sources promptly. (Prohibition of smoking, sparks, and flames in the surrounding area).
- Isolate flammables (such as wood, paper, and oil) from the leakage.
### Section 7 - HANDLING AND STORAGE

<table>
<thead>
<tr>
<th>Handling Technical Measures</th>
<th>Precautions for Safe Handling</th>
</tr>
</thead>
</table>
| Prevents Handling of Incompatible Substances or Mixtures | Do not handle until all safety precautions have been read and understood.  
Evacuate area due to explosion risk in case of fire.  
Handle at a well-ventilated place.  
Avoid release to the environment.  
Do not get in eyes, on skin or on clothing.  
Ventilate the exhaust to keep the concentration in the air below the exposure limit.  
Obtain special instructions before use.  
Use properly by reading “Precautions for Use” labeled on the container before use or disposal.  
Wash hand thoroughly after handling.  
Prohibit use of heat, sparks, and fire in the surrounding area.  
Do not contact, breathe or swallow.  
Do not expose to temperatures exceeding appropriate temperature.  
Do not breathe dust and fume.  
Do not handle containers with such manners as tumbling down, falling, exposing to shock, or dragging. |

<table>
<thead>
<tr>
<th>Specific Hygiene Measures</th>
<th>Prevents Handling of Incompatible Substances or Mixtures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Storage Precautionary Statements Technical Measures</td>
<td>Refer to “Section 10 – STABILITY AND REACTIVITY”.</td>
</tr>
</tbody>
</table>
| - The storage facility should be provided with necessary lighting, lighting equipment, and ventilator to store and handle dangerous goods.  
The storage floor should have penetration-proof construction against dangerous goods and be inclined adequately. A proper sump should be provided to catch any spills.  
The roof of a storage facility should be made of a non-combustible material and use metals or other lightweight non-combustible materials. No ceiling should be installed.  
The storage facility should be designed with fire-proof construction and beams should use a non-combustible material.  
Refer to “Section 10 – STABILITY AND REACTIVITY”.  
Store away from incompatible materials.  
Store locked up.  
Have containers keep away from direct sunlight and heat.  
Wash hand thoroughly after handling. |

<table>
<thead>
<tr>
<th>Storage Technical Measures</th>
<th>Storage Precautionary Statements</th>
</tr>
</thead>
</table>
| Provide ventilation system and use necessary personal protective equipment as described in “Section 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION”. | The storage facility should be provided with necessary lighting, lighting equipment, and ventilator to store and handle dangerous goods.  
The storage floor should have penetration-proof construction against dangerous goods and be inclined adequately. A proper sump should be provided to catch any spills.  
The roof of a storage facility should be made of a non-combustible material and use metals or other lightweight non-combustible materials. No ceiling should be installed.  
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Store locked up.  
Have containers keep away from direct sunlight and heat. |
Section 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

<table>
<thead>
<tr>
<th>Material Used in Packaging/ Containers</th>
<th>Exposure Limits (ACGIH)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polybutadiene Epoxydized</td>
<td>Not established</td>
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</table>

Engineering Controls

Workplace storing or handling this product should be equipped with eye washing station and safety shower.
Use process enclosures, local exhaust ventilation, or other engineering controls.
Install ventilation system to keep exposure to airborne contaminants below the exposure limit if vapor, fume, mist generates in the process handling at elevated temperature.
Take precautionary measures against static discharge.
Use explosion-proof electrical, ventilating and lighting equipment.
Install explosion-proof local ventilation equipment.
Ground or bond container and receiving equipment.

Personal Protective Equipment

<table>
<thead>
<tr>
<th>Respiratory Protection</th>
<th>Wear respiratory protection.</th>
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<tbody>
<tr>
<td>Hand Protection</td>
<td>Wear protective gloves.</td>
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<tr>
<td>Eye Protection</td>
<td>Protection glasses (ordinary glasses, ordinary glasses with side shields, and goggles).</td>
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<tr>
<td>Skin and Body Protection</td>
<td>Wear protective clothing and face protection.</td>
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</table>

Section 9 – PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Appearance</th>
<th>Form</th>
<th>Color</th>
<th>Odor</th>
<th>Odor threshold</th>
<th>pH</th>
<th>Melting Point/Freezing Point</th>
<th>Initial Boiling Point and Boiling Ranges</th>
<th>Flash Point</th>
<th>Evaporation Rate</th>
<th>Flammability (solid, gas)</th>
<th>Flammability or Explosive Limits</th>
<th>Lower Limit</th>
<th>Upper Limit</th>
<th>Vapor Pressure</th>
<th>Vapor Density</th>
<th>Specific Gravity (Density)</th>
<th>Partition Coefficient : n-Octanol/Water</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>liquid (viscous)</td>
<td>clear</td>
<td>slight odor</td>
<td>No data available</td>
<td>No data available</td>
<td>No data available</td>
<td>No data available</td>
<td>310°C (Cleveland Open Cup)</td>
<td>No data available</td>
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</tbody>
</table>
Auto-Ignition Temperature
Decomposition
Temperature
Viscosity
Kinematic viscosity

Section 10 - STABILITY AND REACTIVITY
Reactivity
Chemical stability
Possibility of Hazardous Reaction
Conditions to Avoid
Incompatible Substances or Mixtures
Hazardous Decomposition Products

Section 11 - TOXICOLOGICAL INFORMATION
Acute Toxicity Oral
Skin Corrosion/Irritation
Respiratory or Skin Sensitization
Germ Cell Mutagenicity

Section 12 - ECOLOGICAL INFORMATION
Hazard to the aquatic environment (acute hazard)
Hazard to the aquatic environment (long-term hazard)
Hazard to the ozone layer

Section 13 - DISPOSAL CONSIDERATIONS
Residual Waste
Contaminated Container and Packaging

Section 14 - TRANSPORT INFORMATION

It's not self-ignite in contact with air at ambient temperature.

No data available

No data available

No data available

No data available

No data available

No data available

Stable under ordinary conditions of use and storage.

React with strong oxidizers (ex. Nitrate), strong alkalis or strong acids may cause fire and explosions.

Fire, heat, incompatibles.

Strong oxidizers, strong alkalis, strong acids.

Burning may produce toxic gases (carbon dioxide and carbon monoxide and so on).

Out of category; LD50>2000mg/kg (Rat)

Out of category; From the skin irritation test (4hr, 500mg, rabbit); no irritating, P.I.I=0.

Out of category (Skin Sensitization); From the skin sensitization test (LLNA-DA test (TG442A simplified test method) results; negative. Ames test; negative.

No data available

No data available

No data available

Commission a waste disposal company, or a local public body who are licensed by local or regional government, to dispose of the material.

Disposal should be in accordance with applicable regulations and standards by the respective local governments.

When commissioning the disposal to a disposal company, notify the danger and toxicity thoroughly to the company.

In case of disposal of empty containers, remove the content thoroughly.

Recycle containers after cleansing, or carry out the disposal under the related laws and regulations and the standards of the local governments.
International Regulations  Regulatory Information by Sea
Marine Pollutant Transport in bulk according to MARPOL 73/78, Annex II, and the IBC code
Regulatory Information by Air

Emergency Response Guide Number

Section 15 – REGULATORY INFORMATION
Details of international registration status

ENCS(Japan); 6–759
TSCA(USA); Listed
DSL(Canada); Listed
ECL(Korea); KE–28850
IECSC(China); Listed
ECN(Taiwan); Listed
PICCS(Philippines); Listed
AICS(Australia); Listed

Section 16 – OTHER INFORMATION
Information Contact
Other Property
See Sec.1 (Company identification)
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Final determination of suitability of any material is the sole responsibility of the information contained herein.
All materials may present unknown hazards and should be used with caution.
Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.