Material Safety Data Sheet (MSDS)

1. **Product Name:** Solid Polycarbonate Sheet - 1 side UV protected  
Description: Solid Polycarbonate (PC) Thermoplastic sheet with one side UV surface protection  
Product Use: A sheet for flat, curved and thermoformed glazing applications.

2. **Composition/information on ingredients**  
Main Polymer: Poly (bishphenol-a-carbonate, CAS 24936-68-3)

3. **Hazard Identification**  
**Potential Health Effects**  
<table>
<thead>
<tr>
<th>Eyes</th>
<th>Product may cause irritation or injury due to mechanical action.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin</td>
<td>Sheet not likely to cause skin irritation</td>
</tr>
<tr>
<td>Ingestion</td>
<td>Not acutely toxic</td>
</tr>
<tr>
<td>Inhalation</td>
<td>Sheet inhalation unlikely due to physical form.</td>
</tr>
</tbody>
</table>

4. **First Aid Measures**  
<table>
<thead>
<tr>
<th>Eyes</th>
<th>No first aid required</th>
</tr>
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<tbody>
<tr>
<td>Skin</td>
<td>No first aid required</td>
</tr>
<tr>
<td>Ingestion</td>
<td>Since this material is not expected to be a problem, no first aid procedures are required.</td>
</tr>
</tbody>
</table>

**Melt processing health effects:**  
Processing fumes may cause irritation to the eyes and respiratory tract, and in cases of severe over exposure, nausea and headache.

**Medical restrictions**  
When heated to processing temperatures virtually all thermoplastics emit processing fumes. The exact composition and concentration of these processing fumes depends on the resin formulation including additives, the residence time in the processing equipment, variables such as venting parameters and processing temperature. Certain sensitive individuals and those with respiratory impairments, may experience some temporary irritation by exposure to specific components in the processing fumes.

5. **Fire Fighting Measures**  
**Fire fighting**  
Approved pressure demand breathing apparatus and protective clothing should be used for all fires. Water spray is the preferred extinguishing medium. This product will melt but will not be carried on the surface of water.
**Extinguishing media**
Water spray and foam. Water is the best extinguishing medium. Carbon dioxide and dry chemicals are not generally recommended because their lack of cooling capacity may permit re-ignition.

**Hazardous combustion**
Hazardous combustion products may include intense heat, dense black smoke, carbon monoxide, carbon dioxide and traces of hydrocarbon fragments.

**Conditions of flammability**
**Explosion data**
**Impact Sensitivity** Not sensitive to mechanical impact.
**Static Discharge** Not sensitive to static discharge.

**6. Accidental Release Measures**
**General** Sweep or gather up material and place in proper container for disposal or recovery.

**7. Handling and Storage**
**Handling practices.** Following good standard industrial hygiene. Provide adequate ventilation.
**Storage** Inert material under normal storage conditions. No special precautions required. Do not stack unsupported sheets or pallets too high.

**8. Exposure Controls/personal protection**
**Personal protection**
**Eyes/face** Wear safety glasses with side shields when cutting the sheets.

**Respiratory**
Good industrial hygiene practice requires adequate ventilation of the workplace. When dust and powder from secondary operations, such as grinding, sanding or sawing are not adequately controlled, use respirator approved for protection for dust.

**9. Physical and Chemical Properties**
**Physical State** Solid
**Odour and appearance** Plastic sheet with slight odour
**Boiling point** Not applicable
**Melting point** This product does not exhibit a sharp melting point but softens gradually over a wide temperature range.
**Vapour pressure (mmHg)** Negligible
Vapour density (air=1)  | Not applicable
---|---
Specific gravity  | >1
  (water=1)
Water solubility  | Insoluble
% Volatiles  | Negligible
pH  | Not applicable
Odor threshold  | Not established
Evaporation rate  | Negligible
  | Not established
Coefficient water/oil distr.  | Not applicable
Flash point  | Not applicable
Lower flammable limit  | Not established
Upper flammable limit  | Not established
Auto ignition  | 630°C estimated

10. Stability and Reactivity

Stability  | Stable under recommended conditions of storage and handling.
Reactivity  | Not reactive under recommended conditions of handling, storage, processing and use.
Hazardous  | Processing fumes evolved at recommended processing conditions may include trace levels of phenol, alkylphenols, and diarylcarbonates.

11. Toxicological Information

- Acute oral  | Oral LD50 (Rat) > 5g/Kg estimated

12. Ecological Information

General  | Not expected to present any significant ecological problems.

13. Disposal Information

Recycling:  | This product may be recycled either back into sheet or into suitable other applications.
Waste disposal:  | This product is not regarded as hazardous waste. Dispose in accordance with local regulations.

14. Transportation Information

General  | This product is not subject to transport regulations.
15. Regulatory information

This product is not considered dangerous under EU directives 67/548/EEC and 88/379/EEC, as amended.

16. Other

This publication provides information and guidelines for safe handling and cutting of Polycarbonate sheet and is based on currently available experience and knowledge. It is not designed as a comprehensive product performance data sheet, nor as a guide to application possibilities of our materials.

Users should follow all applicable local regulations governing Health and Safety at work, and are requested to pass this publication on to all relevant employees and customers.