

## 1. Supplier

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## 2. Product description

**Commercial product name:** Duratron® LSG PEI

These products are 'articles' according to the Regulation (EC) No 1907/2006 (REACH).

**Material characterization:** Polyetherimide [PEI]

## 3. Product characteristics

<b>Form:</b>	semi-finished products (round rods, plates) / finished parts machined from semi-finished products	
<b>Colour:</b>	natural (amber, translucent)	
<b>Odour:</b>	odourless	<b>Test methods</b>
<b>Density:</b>	1.27 g/cm <sup>3</sup>	ISO 1183-1
<b>Melting temperature:</b>	- <small>Values for this property are only given here for amorphous materials and not for semi-crystalline ones.</small>	ISO 11357-1/-3
<b>Glass transition temperature:</b>	220 °C	ISO 11357-1/-2
<b>Thermal decomposition:</b>	> 530 °C	
<b>Self-ignition temperature:</b>	535 °C	ASTM D 1929
<b>Solubility in water:</b>	insoluble	

## 4. Handling and storage

<b>Machining:</b>	During machining of the semi-finished products, evacuate swarf to prevent slipping or tripping hazard and observe the maximum allowable concentration of dust and formaldehyde levels on the workplace which apply in your country. Wear safety goggles during machining.
<b>Storage:</b>	The products shall be stored indoors in a normal environment (air at 10 - 30°C / 30 - 70% RH) and kept away from any source of degradation such as sunlight, UV-lamps, chemicals (direct or indirect contact), ionising radiation, flames, etc. Dimensional changes (camber, warpage, shrinkage ...) of the products as well as slight colour shifts of the external surfaces can occur with time. The latter does generally not pose a problem in case of semi-finished products since the surface-layer is mostly removed anyway upon machining them into finished parts.
<b>Safety measures:</b>	Standard industrial safety recommendations shall be observed. Temperatures above 350 °C shall be avoided.

Please also note the disclaimer on page 3 of this document.

## 5. Fire-fighting measures

**Suitable extinguishing media:** Water, foam, dry chemical, CO<sub>2</sub>. Adapted to the nature and extend of fire.

**Hazardous decomposition products:**

The main products formed in case of overheating and combustion are carbon monoxide, carbon dioxide, nitrogen oxide (NO<sub>x</sub>) and hydrogen cyanide. Formation of further hazardous decomposition products depends upon the fire conditions and cannot be excluded.

**Special protective equipment:** Firemen should wear self-contained breathing apparatus and protective clothing to prevent contact with skin and/or eyes. If exposed to combustion fumes in a high concentration, bring the victim into fresh air. If molten material contacts skin, cool rapidly with cold water and obtain medical attention for removal of adhering material and treatment of the burn.

## 6. Disposal considerations

According to the 'European Waste Catalogue and Hazardous Waste List', uncontaminated waste from the products is not classified as hazardous. The following six-digit codes can be used:

- |          |   |
|----------|---|
| 07 02 13 | waste plastic from the manufacture, formulation, supply and use of plastics   |
| 12 01 05 | plastic shavings and turnings   |
| 16 01 19 | plastic, from end-of-life vehicles from different means of transport (including off-road machinery) and wastes from dismantling of end-of-life vehicles and vehicle maintenance |
| 17 02 03 | plastic construction and demolition wastes  |
| 20 01 39 | plastics from municipal wastes (household waste and similar commercial, industrial and institutional wastes)  |

**Waste disposal:** When recycling is not feasible, waste disposal by incineration or landfill can be applied. Disposal methods shall conform to local or other government regulations. The products do not contain cadmium pigments or cadmium stabilisers. They are not biologically degradable, but based on the present state of knowledge no negative effects on the environment may be anticipated.

## 7. Marking and transport information

**Classification and labelling:** Hazard warning labelling in accordance with relevant EC-Directives is not required.

**International transport regulations:**  
Not applicable

## 8. Other information

Consult the Mitsubishi Chemical Advanced Materials website for the latest information on the Mitsubishi Chemical Advanced Materials products (product data sheets, delivery programme, machining instructions, chemical resistance, regulatory information ...) as well as for our statements concerning the European Regulation (EC) No 1907/2006 (REACH).

Mitsubishi Chemical Advanced Material's Life Science Grades (LSG) should not be used for applications involving medical devices that are intended to remain implanted in the human body continuously for a period exceeding 24 hours/30 days\*, or are intended to remain in contact with internal human tissue or bodily fluids for more than 24 hours/30 days\*, or as critical components of medical devices that are essential to the continuation of human life.

\*: the period of 30 days only applies to Ketron® CLASSIX™ LSG PEEK white.

Please also note the disclaimer on page 3 of this document.

**Duratron® and Ketron®** are registered trademarks of the **Mitsubishi Chemical Advanced Materials Group**. **CLASSIX™ PEEK** is a trademark of **Invibio Ltd**.

This brochure and any data and specifications presented on our website shall provide promotional and general information about the Engineering Plastic Products (the "Products") manufactured and offered by Mitsubishi Chemical Advanced Materials and shall serve as a preliminary guide. All data and descriptions relating to the Products are of an indicative nature only. Neither this brochure nor any data and specifications presented on our website shall create or be implied to create any legal or contractual obligation.

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