

1. Supplier

Mitsubishi Chemical Advanced Materials NV

I.P. Noord - Galgenveldstraat 12

B - 8700 Tielt

Tel.: +32/(0)51/42 35 11 Fax: +32/(0)51/42 33 00

2. Product description

Commercial product name: Proteus® LSG HS PP

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

Material characterization: Polypropylene [PP]

3. Product characteristics

Form: semi-finished products (round rods, plates) / finished parts machined from semi-

finished products

Colour: natural (white) / black

Odour: Test methods
Odourless

Density: 0.92 g/cm³ ISO 1183-1

Melting temperature: 165 °C ISO 11357-1/-3

Glass transition temperature: - ISO 11357-1/-2

Values for this property are only given here for amorphous materials and not for semi-crystalline ones.

Thermal decomposition: $> 300 \, ^{\circ}\text{C}$

Self-ignition temperature: > 400 °C ASTM D 1929

Solubility in water: insoluble

4. Handling and storage

Machining: 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.

Storage: 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.

Safety measures: Standard industrial safety recommendations shall be observed.

Temperatures above the melting temperature shall be avoided.

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

ppyright © 2022 Mitsubishi Chemical Advanced Materials group of companies. All rights reserved. - Date / Rev.: 28 July 2022 - Version 2.0



5. Fire-fighting measures

Suitable extinguishing media: Water, foam, dry chemical, CO2. 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 and water. 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.

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.

Marking and transport information

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

required.

International transport regulations:

Not applicable

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).

Proteus® is a registered trademark of the Mitsubishi Chemical Advanced Materials Group. Ketron® is a registered trademark of the Mitsubishi Chemical Advanced Materials Group. CLASSIX™ PEEK is a trademark of Invibio Ltd.

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

pyright © 2022 Mitsubishi Chemical Advanced Materials group of companies. All rights reserved. - Date / Rev.: 28 July 2022 - Version 2.0



All statements, technical information, recommendations, and advice are for informational purposes only and are not intended and should not be construed as a warranty of any type or term of sale. The reader, however, is cautioned that Mitsubishi Chemical Advanced Materials does not guarantee the accuracy or completeness of this information and it is the customer's responsibility to test and assess the suitability of the products of Mitsubishi Chemical Advanced Materials in any given application or for use in a finished device.

The products of Mitsubishi Chemical Advanced Materials 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.

*: "30 days" applies to Ketron® PEEK-CLASSIX™ LSG white only.

Mitsubishi Chemical Advanced Materials is not a medical device manufacturer and the information herein does not constitute any express or implied warranties or representations whatsoever, including, but not limited to, all warranties provided for by any applicable law, any implied warranty of merchantability, of fitness for a particular purpose, any warranty against hidden defects or redhibitory defects or vices, or that the products of Mitsubishi Chemical Advanced Materials are manufactured in accordance with the quality standards appropriate and necessary for materials intended for use in implantable medical device applications and in applications that are essential to the restoration of or continuation of a bodily function important to the continuation of human life.

PEEK-CLASSIX™ is a trademark of Invibio Ltd.

3/3