

PETILEN YY I668(UV)

High Density Polyethylene (HDPE)

Description

PETILEN YY I668(UV) is a high density polyethylene resin developed for injection molding applications. Having narrow molecular weight distribution, PETILEN YY I668(UV) is an ideal raw material for the manufacture of products requiring rigidity and toughness. The resin is stabilized against UV radiation to allow prolonged exposure to sunlight.

Applications

Injection molding: bottle crates, bottle caps, kitchen goods

Compliance to Regulations

The formulation and production of PETILEN YY I668(UV) conforms to the compositional requirements of the Commission Regulation (EU) No. 10/2011.

Properties	Typical Value (*)	Unit	Test Method
Resin Properties			
Melt Flow Rate (190°C/2.16 kg)	5.5	g/10 min	ASTM D1238
Density, 23°C	0.965	g/cm ³	ASTM D1505
Melting Point (DSC)	134	°C	ASTM D3418
Mechanical Properties (**)			
Tensile Strength at Yield	30	MPa	ASTM D638
Tensile Strength at Break	17	MPa	ASTM D638
Elongation at Break	1250	%	ASTM D638
Flexural Modulus, 23°C	1200	MPa	TS EN ISO 178
Izod Impact Strength, 23°C (notched)	50	J/m	ASTM D256
Hardness (Shore D)	66	-	ASTM D2240
Environmental Stress Crack Resistance (10% Igepal, F50)	4	h	ASTM D1693
Thermal Properties			
Vicat Softening Point, 10 N	124	°C	ASTM D1525

(*) These are typical properties only and are not to be construed as specifications. Customers should confirm results by their own tests.

(**) The values given are measured based on compression molded sheet.

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Recommended Processing Conditions

Injection molding applications;
Typical melt temperature: 200 - 260°C
Typical mold temperature: 10 - 40°C
Typical injection pressure: As high as possible

Processing conditions should be optimized for different equipment design.

Health, Safety and Food Contact Regulations

The detailed information of the PETILEN YY I668(UV) product is given in Safety Data Sheet and Food Contact Declaration of the product. Please contact your sales representatives for the food contact application compliance (e.g. EU, FDA) and other regulatory documents.

Storage

The product should be stored in a dry area with an ambient temperature below 50°C. It should be kept away from sunlight, sparks, heat and flame. Inappropriate storage conditions can lead to color changes and the deterioration in physical properties. It is advised to process PE resins within 6 months after delivery.

Recycling

The product is not hazardous or toxic and it is suitable for recycling. If it can't be recycled, the waste material can be disposed at a suitable landfill site, or at an approved waste incineration facility in accordance with applicable local, provincial, state and federal regulations.

Medical Applications Policy

The product mentioned herein is not tested for use in pharmaceutical/medical applications. It is the responsibility of the final product manufacturer to determine that PETKIM product is suitable for intended use.

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