

PETILEN YY I468(UV)

High Density Polyethylene (HDPE)

Description

PETILEN YY I468(UV) is a high density polyethylene resin developed for injection molding applications. Having narrow molecular weight distribution, PETILEN YY I468(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: palets, crates, cases and similar items

Compliance to Regulations

The formulation and production of PETILEN YY I468(UV) conforms to the compositional requirements of the Commission Regulation (EU) No. 10/2011.

Properties	Typical Values (*)	Units	Test Methods
Resin Properties			
Melt Flow Rate (190°C/2.16 kg)	4.0	g/10 min	ASTM D1238
Density, 23°C ⁽¹⁾	0.965	g/cm ³	ASTM D1505
Melting Point (DSC, 2nd heating)	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	1000	%	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)	65	-	ASTM D2240
Environmental Stress Crack Resistance (10% Igepal, F50)	4	h	ASTM D1693
Thermal Properties			
Vicat Softening Point, 10 N	124	°C	ASTM D1525

(1) Measured on specimens, prepared according to ASTM D2839.

(*) 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.

PETILEN YY I468(UV)

High Density Polyethylene (HDPE)

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 I468(UV) product is given in Material Safety Data Sheet and Food Contact Declaration of the product. Please contact your sales representatives or visit web site for the food contact application compliance (e.g. EU, FDA) and other regulatory documents.

Packing and Storage

The material is packaged in PE bags or in PP Big Bags. 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 bad smell, color changes and the deterioration in physical properties. It is advised to process PE resins within 6 months after delivery. Prior to processing PE product bags shall be kept in production area for at least 12 hours.

Recycling

The product is not hazardous or toxic and it is suitable for recycling using available recycling methods.

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.

Disclaimer

© 2023 PETKIM PETROCHEMICAL HOLDING INC. The user may photocopy, distribute and/or forward this document only if unaltered and complete including its headers, footers and other information. You may not publish this document on a website. PETKIM does not guarantee the typical values. The information in this document relates only to the given product when not in combined or compounded with any other materials. The information in this document is based on data reliable on the date compiled. PETKIM may add, remove and/or update information in this document at any time without noticing the users. PETKIM does not guarantee the merchantability, suitability, fitness for particular purpose, accuracy, reliability or completeness of this information or the products specified. The user is solely responsible for any use of the product at any process. PETKIM disclaims liability for any loss, damage or injury directly or indirectly suffered or incurred as a result or related to anyone using or relying on any information in this document.