

# PETILEN YY I860(UV)

## High Density Polyethylene (HDPE)

### Description

PETILEN YY I860(UV) is a UV-stabilized high density polyethylene grade with a narrow molecular weight distribution, suitable for a wide range of injection moulding applications. PETILEN YY I860(UV) offers high rigidity, good impact strength, good weather resistance, easy processing and high warpage resistance.

### Applications

Injection molding: crates, boxes, cases, trays, baskets, housewares, toys etc.

### Compliance to Regulations

The formulation and production of PETILEN YY I860(UV) conforms to the compositional requirements of the Commission Regulation (EU) No. 10/2011.

Properties	Typical Values (*)	Units	Test Methods
<b>Resin Properties</b>			
Melt Flow Rate (190°C/2.16 kg)	7.5	g/10 min	ASTM D1238
Density, 23°C <sup>(1)</sup>	0.960	g/cm <sup>3</sup>	ASTM D1505
Melting Point (DSC, 2nd heating)	133	°C	ASTM D3418
<b>Mechanical Properties (**)</b>			
Tensile Strength at Yield	30	MPa	ASTM D638
Tensile Strength at Break	20	MPa	ASTM D638
Elongation at Break	>500	%	ASTM D638
Flexural Modulus, 23°C	1200	MPa	TS EN ISO 178
Izod Impact Strength, 23°C (notched)	40	J/m	ASTM D256
Hardness (Shore D)	64	-	ASTM D2240
Environmental Stress Crack Resistance (10% Igepal, F50)	4	h	ASTM D1693
<b>Thermal Properties</b>			
Vicat Softening Point, 10 N	126	°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 I860(UV)**

## **High Density Polyethylene (HDPE)**

### **Recommended Processing Conditions**

Injection molding applications;  
Typical melt temperature: 190 – 250°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 I860(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**

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