**Technical Data Sheet**

# *PETILEN YY S0464*
# *High Density Polyethylene (HDPE)*

## Description

PETILEN YY S0464 is a high density polyethylene resin having medium molecular weight distribution. The product is developed for medium size blow molding applications. The high flexural modulus of the material makes it possible to produce rigid goods.

## Applications

Blow molding: various food bottles, medium size containers, kitchen goods
Monofilaments, raffia, LDPE/LLDPE coex films (in middle layer of coex films to increase stiffness and mechanical properties)
Sheet extrusion

## Compliance to Regulations

The formulation and production of PETILEN YY S0464 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) | 0.36 | g/10 min | ASTM D1238 |
| Density, 23°C (1) | 0.961 | g/cm³ | ASTM D1505 |
| Melting Point (DSC, 2nd heating) | 134 | °C | ASTM D3418 |
| **Mechanical Properties (**)** | | | |
| Tensile Strength at Yield | 28 | MPa | ASTM D638 |
| Tensile Strength at Break | 31 | MPa | ASTM D638 |
| Elongation at Break | 1115 | % | ASTM D638 |
| Flexural Modulus, 23°C | 1150 | MPa | TS EN ISO 178 |
| Izod Impact Strength, 23°C (notched) | 300 | J/m | ASTM D256 |
| Hardness (Shore D) | 65 | - | ASTM D2240 |
| Environmental Stress Crack Resistance (10% Igepal, F50) | 16 | h | ASTM D1693 |
| **Thermal Properties** | | | |
| Vicat Softening Point, 10 N | 128 | °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.*



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## Recommended Processing Conditions

Blow molding applications;
Typical barrel temperature: 180 - 200°C
Typical melt temperature: 190 - 210°C

Processing conditions should be optimized for different equipment design.

## Health, Safety and Food Contact Regulations

The detailed information of the PETILEN YY S0464 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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