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Rotomolding LMDPE Resins

Technical Data Sheet

**POWDERMIX LP-3642**

Linear Medium Density Polyethylene Powder for Rotational Molding

**DESCRIPTION**

POWDERMIX **LP-3642** is a Medium Density Linear Polyethylene Resin (LMDPE) in powder, additivated with antioxidants and UV stabilizers. It is suitable for Rotational Molding applications. Items produced by POWDERMIX **LP-3642** have a good balance between mechanical properties and ESCR resistance. **LP-3642** is produced in: natural, black. Upon request in terracotta, fire red, yellow.

**APPLICATIONS**

Due to its combination of mechanical properties, ESCR resistance and fluidity, POWDERMIX **LP-3642** is suggested for the production of medium capacity containers and hardly shaped items, wine barrels, playgrounds, road barriers. It is NOT the right material for playground slides, solid waste tubes, small boats. Grades colored Black, Teracotta & Natural, are Food Approved.

**PROPERTIES TYPICAL**

| <b>LP-3642 Resin Properties</b>  | <b>Test Method</b> | <b>Typical Value</b> |
|----------------------------------|--------------------|----------------------|
| Density (gr/cm <sup>3</sup> )    | ASTM D 1505        | 0,936                |
| Melt Flow Index (MFI)            | ASTM D 1238        | 4,2                  |
| Melting Point (°C)               |                    | 126                  |
| Brittleness Point (°C)           | ASTM D 746         | <-70                 |
| Vicat Softening Temperature (°C) | ASTM D 1525        | 113                  |
| Tensile Strength at Yield (Mpa)  | ASTM D 638         | 18,5                 |
| Tensile Strength at Break (Mpa)  | ASTM D 638         | 21                   |
| Elongation at Break (%)          | ASTM D 638         | 900                  |
| Flexural Modulus (Mpa)           | ASTM D 790         | 690                  |
| Izod Impact Strength at -30 °C   | ASTM D 256         | 60                   |
| Hardness Shore D                 | ASTM D 2240        | 58                   |
| Envir.Stress Cracking Resistance | ASTM D 1693        | >350                 |

Typical Values refer to the base resin (natural). Values are typical, depending from the lot of base resin production. Values refer to an injection molded plaque of 4 mm thickness. Values may differ in rotomolding production.