PRODUCT SELECTION GUIDE

HDPE



Grades Used in Injection Molding Applications (1/2)

| Properties | Physical | | | Mechanical | | | | | | | | Other | Specific Characteristics and Typical Customer Applications |
|------------------------|----------------------|--------------------|-----------------|--------------------|-------------------|-----------------------|-----------------------------------|--------|-------------------|-----------------------|--------------------|-----------------------------|---|
| | Density MFR | | FR | Tensile Modulus | Tensile Stress | Tensile Elongation | Charpy Notched Impact Strength | | Shore Hardness | Ball Indentation | Vicat Softening | ESCR (FNCT: 6.0 | |
| | 23 °C | 190 °C, 2.16 kg | 190 °C, 5 kg | | at Yield | at Yield | 23 °C | -30 °C | (Shore D) | Hardness (H132/30) | Temp (B/50) |) MPa, 2% Arkopal, 50 °C | |
| Test Method | ISO 1183 | ISO 1133 | | ISO 527 | | | ISO 179-1/1eA | | ISO 868 | ISO 2039-1 | ISO 306 | ISO 16770 | |
| Unit | g/cm³ | g/10 | min | MPa | MPa | % | kJ | /m² | | MPa | °C | h | |
| High Density Polyethyl | ene, <i>Hostalen</i> | | | | | | | | | | | | |
| Hostalen GC 7260 | 0.960 | 8.0 | 23 | 1450 | 30 | 7 | 4.0 | 4.5 | 61 | 58 | 74 | 2.5 | High stiffness, good impact resistance at low temperatures and optimum ESCR. Typical customer applications: crates, cartridges, caps & closures, toys & leisure products, housewares and panels & profiles |
| Hostalen GC 7260 LS | 0.960 | 8.0 | 23 | 1450 | 30 | 7 | 4.0 | 4.5 | 61 | 58 | 74 | 2.5 | Light-stabilized (UV) grade with high stiffness, good impact resistance at low temperatures and optimum ESCR. Typical customer applications: crates, toys & leisure products, housewares, panels & profiles and lids for dust bins |
| Hostalen GC 7258 | 0.958 | 8.0 | 22 | 1400 | 28 | 7 | 4.0 | 4.5 | 62 | 56 | 73 | 2.5 | High stiffness combined with optimum ESCR, good impact resistance at low temperatures. Typical customer applications: cartridges, caps & closures, crates, toys & leisure, housewares and panels & profiles |
| Hostalen GD 7255 | 0.955 | 4.0 | 11 | 1200 | 27 | 8 | 4.0 | 4.5 | 60 | 52 | 73 | 4.5 | High impact resistance at low temperatures, good stiffness and optimum ESCR. Typical customer applications: crates, caps & closures, toys & leisure products, housewares, panels & profiles and pallets |
| Hostalen GD 7255 LS | 0.955 | 4.0 | 11 | 1200 | 27 | 8 | 4.0 | 4.5 | 60 | 52 | 73 | 4.5 | Light-stabilized (UV) grade with high impact resistance at low temperatures, good stiffness and optimum ESCR. Typical custome applications: crates, caps & closures, toys & leisure products, panels & profiles, dust bins and pallets |

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PRODUCT SELECTION GUIDE

LDPE



Grades Used in Injection Molding Applications (2/2)

| Properties | Physical | | | Mechanical | | | | | | | | Specific Characteristics and Typical Customer Applications |
|----------------------|----------------------|--------------------|-----------------|--------------------|-------------------|-----------------------|-----------------------------------|--------|-------------------|----------------------|--------------------|---|
| | Density MFR | | IFR | Tensile Modulus | Tensile Stress | Tensile Elongation | Charpy Notched Impact Strength | | Shore Hardness | Ball Indentation | Vicat Softening | |
| | 23 °C | 190 °C, 2.16 kg | 190 °C, 5 kg | | at Yield | / Strain at Yield | 23 °C | -30 °C | (Shore D) | Hardness (H49/30) | Temp (A/50) | |
| Test Method | ISO 1183 | ISO | ISO 1133 | | ISO 527 | | ISO 179-1/1eA | | ISO 868 | ISO 2039-1 | ISO 306 | |
| Unit | g/cm³ | g/10 min | | MPa | MPa | % | kJ/m² | | | MPa | °C | |
| Low Density Polyethy | lene, <i>Lupolen</i> | | | | | | | | | | | |
| Lupolen 1800 H | 0.919 | 1.5 | - | 200 | 9 | N/A | N/A | N/A | 45 | 15 | 88 | Low density, good flexibility, high impact and optimum ESCR. Typical customer applications: shoe insoles, pipe clamps, lids, car boot/trunk lining, brushes and champagne corks |
| Lupolen 1800 P | 0.918 | 15 | - | 200 | 9 | NA | NA | NA | 45 | 12 | 80 | Low density, good flexibility and high flowability. Applications include use as a base resin for masterbatches and compounding |
| Lupolen 1800 S | 0.917 | 20 | _ | 160 | 8 | N/A | N/A | N/A | 45 | 13 | 80 | Low density, good flexibility and high flowability. Typical customer applications: ink cartridges, shoes and flippers for swimming, and brushes. Other applications include use as a base resin in masterbatches and compounding |
| Lupolen 1800 U | 0.918 | 65 | _ | 180 | 8 | N/A | N/A | N/A | 45 | 12 | 75 | Very high flowability with good balance of toughness, softness, dimensional stability and easy processability. Typical customer applications: consumer packaging and thin-wall injection molding. Other applications include use in masterbatches and as a viscosity modifier for compounds |
| Lupolen 2420 K | 0.924 | 4 | - | 260 | 11 | N/A | N/A | N/A | 48 | 18 | 92 | Medium-flow LDPE with good impact resistance and optimum ESCR. Typical customer applications: collector trays for perforators, seals, bottle closures & packaging and safety traps in baby highchairs. Additional version (<i>Lupolen</i> 2426 K) with slip agent available |
| Lupolen 3020 K | 0.928 | 4 | - | 300 | 13 | N/A | N/A | N/A | 51 | 21 | 97 | Medium-flow LDPE with good stiffness and optimum ESCR. Typical customer applications: ink cartridges and hand grips. Additional version (<i>Lupolen</i> 3026 K) with slip agent available |

N/A = Not Applicable

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