SCG SIAM CEMENT GROUP CHEMICALS

Technical Datasheet | High Density Polyethylene for Injection Molding

# EL-Lene™ H6007JU

## Product Description

EL-Lene H6007JU is a high density polyethylene resin with good processibility and UV resistance suitable for industrial product produced from injection molding process.

## Typical Application

- Crate for beverage bottle
- Pallet
- Industrial parts for outdoor uses

## Product Characteristics

- High UV resistance and good processibility
- Good stiffness and impact resistance
- Food contact applicable (Complies with U.S FDA 21 CFR 177.1520)

## Physical Properties

| Property | Test Method | Value | Unit |
|---|---|---|---|
| Melt Flow Rate | ASTM D 1238 @ 190°C, 2.16 kg | 7.5 | g/10 min |
| Density | ASTM D 1505 | 0.964 | $g/cm^3$ |
| Tensile Strength at Yield | ASTM D 638 @ Crosshead speed 50 mm/min | 310 | $kg/cm^2$ |
| Tensile Strength at Break | ASTM D 638 @ Crosshead speed 50 mm/min | 220 | $kg/cm^2$ |
| Elongation at Break | ASTM D 638 @ Crosshead speed 50 mm/min | >650 | % |
| Flexural Modulus | ASTM D 790 | 13500 | $kg/cm^2$ |
| Notched Izod Impact | ASTM D 256 @ 23°C | 3.5 | kg.cm/cm |
| Hardness | ASTM D 2240 | 68 | Shore D |
| ESCR | ASTM D 1693 @ 50°C (Condition B, Compression Molded, 25% Igepal) | 4 | hrs, $F_{50}$ |
| Melting Point | ASTM D 2117 | 133 | °C |
| Vicat Softening Point | ASTM D 1525 | 127 | °C |
| Heat Deflection Temperature (HDT) | ASTM D 648 @ 4.6 $kg/cm^2$ | 75 | °C |
| Brittleness Temperature | ASTM D 746 | - 60 | °C |
| % Shrinkage (2mmt) MD | TPE Method | 1.55 | % |
| TD | TPE Method | 0.96 | % |

Note : Conversion factor for changing unit from $kg/cm^2$ to MPa is divided by 10.20

## Processing Techniques

The actual processing conditions depend on each machine type, product size, mold design and environment.

Recommended processing conditions:

| | | | | |
|---|---|---|---|---|
| Melt temperature: | 200-250°C | Mold temperature: 20-60°C | Injection speed: Fast | Screw speed 40-70 rpm |
| Pressure: | Injection 30-70%, | Packing and Holding 30-50%, | Back 10% | of Max. Pressure |

## Product Available Form

- Pellet

## Product Handling

- 25 kg loose bag
- Big Bag with specified weight

**Product Technical Assistance**

For technical assistance or futher information on this product or any other EL-Lene products, please contact EL-Lene representatives.



**SCG Plastics Co.,Ltd. 1 Siam Cement Road Bangsue Bangkok 10800 Thailand**
**Tel. 66 2586 4874 Fax. 66 2586 5522**

**Rev. Aug'07**