



**SIRJAN GOSTAR CO.**

**HD 5030EA**  
**High Density polyethylene**

**- Product Description**

HD-5030EA is a high-density polyethylene copolymer grade with a narrow molecular weight distribution, specially developed for injection moulding application requiring very high environmental stress cracking resistance. Articles produced from this grade exhibit excellent impact strength and stiffness, low warpage, high purity and quality controlled organoleptic properties, this grade is particularly intended for the packaging in direct contact with beverages.

In order to preserve the excellent organoleptic properties, it is important not to exceed a melt temperature of 250°C during processing.

**- Typical Data:**

| Property                     | Test Method | Unit               | Typical Value |
|------------------------------|-------------|--------------------|---------------|
| <b>Physical Properties</b>   |             |                    |               |
| MFI(190°C/ 2.16Kg)           | ASTM D 1238 | gr/10Min           | 2.0           |
| MFI(190°C / 5.0Kg)           |             |                    | -             |
| Density                      | ASTM D 1505 | gr/cm <sup>3</sup> | 0.950         |
| <b>Formulation</b>           |             |                    |               |
| Anti Oxidant                 |             |                    | √             |
| Slip Agent                   |             |                    | √             |
| UV Stabilizer                |             |                    |               |
| <b>Mechanical Properties</b> |             |                    |               |
| Flexural Modulus             | ASTM D 790  | MPa                | 1100          |
| Tensile Strength at yield    | ASTM D 638  | MPa                | 27            |
| Elongation at Break          | ASTM D 638  | %                  | 1000          |
| Charpy Impact Strength       | ASTM D 256  | Kj/m <sup>2</sup>  | 15            |
| Hardness Shore D             | ASTM D 2240 | -                  | 65            |
| ESCR, F50, 10% Igepal,       | ASTM D1894  | hr                 | 30            |
| <b>Thermal Properties</b>    |             |                    |               |
| Vicat Softening Temperature  | ASTM D 1525 | °C                 | 123           |
| Melting Point                | ASTM D2117  | °C                 | 130           |



**SIRJAN GOSTAR CO.**

**HD 5030EA**  
**High Density polyethylene**

**- Applications:**

**Caps & closures for the packaging of sparkling water and carbonated soft Drinks.**

**Technical parts.**



**- Packing:**

