

Producer: Saudi Basic Industries Corporation (Sabic) /Saudi Arabia

## B5429 Series

### Description:

HDPE for Blow Molding.

**B5429 Series** resins are medium molecular weight High Density Poly-ethylene (HDPE) copolymers. The products are primarily intended for blow molding bottles of small sizes. **B5429 Series** offers excellent combination of toughness, stress cracking resistance, load bearing strength and processability characteristics.

**B5429 Series** includes the following:

| GRADE  | ANTISTATIC |
|--------|------------|
| B5429  | None       |
| B5429A | Yes        |

### Typical Applications:

**B5429 Series** resins are classified as multipurpose blow molding grades. They may be blow molded into containers for household and industrial chemicals (e.g. detergents, bleach, fabric softeners, solvents, paints, etc.), automotive supplies, foodstuffs, toiletries and cosmetics. They can also be used in other hollow thin-walled parts and profile extrusions

| DESCRIPTION OF PROPERTIES           | UNIT              | VALUE <sup>(1)</sup> | TEST METHOD |
|-------------------------------------|-------------------|----------------------|-------------|
| Melt index                          | G/10 min.         | 0.3                  | D-1238      |
| HLM <sup>(2)</sup>                  | G/10 min.         | 29                   | D-1238      |
| Density                             | G/cm <sup>3</sup> | 0.954                | D-1505      |
| Vicat softening point               | °C                | 128                  | D-1525      |
| Brittleness temperature             | °C                | <-75                 | D-746       |
| Secant modulus @ 1% elongation      | Mpa               | 1150                 | D-638       |
| Tensile strength @ yield            | Mpa               | 30                   | D-638       |
| Tensile strength @ break            | Mpa               | 32                   | D-638       |
| Elongation @ break                  | %                 | 850                  | D-638       |
| Izod impact                         | J/m               | 200                  | D-256       |
| Hardness (shore D)                  | -                 | 67                   | D-2240      |
| ESCR (100% Igepal), F <sub>50</sub> | Hrs.              | 90                   | D-1693B     |

Test specimen is prepared from compression molded sheet made according to ASTM D-1928 Procedure C.

<sup>(1)</sup> - Typical values should not be construed as specification limits.

<sup>(2)</sup> - High Load Melt Index has been found to be more accurate reference for B5429.

### Processing Conditions:

**B5429 Series** have been run on the latest high speed blow molding machine at maximum rates to produce articles of excellent quality. Molded parts exhibit outstanding surface appearance. The recommended melt temperature for this series is between 165 and 215°C.

### Food Regulation:

**B5429 Series** High Density Polyethylene resins comply with recommendations and statutory regulations in the USA and most European countries regarding packaging materials intended to come in contact with foodstuff.