



# SABIC® HDPE CC254

HIGH DENSITY POLYETHYLENE

## DESCRIPTION

SABIC HDPE CC254 is state of the art resin produced by ACP technology. It is easy to process on injection molding and compression molding machines. The grade offers good balance of stiffness, toughness and environmental stress cracking resistance properties.

## TYPICAL APPLICATIONS

Caps & Closures for carbonated soft drinks (CSD) and sparkling water, Caps & Closures for food and non-food, Collapsible tubes.

## TYPICAL PROPERTY VALUES

Revision 20180807

| PROPERTIES                                    | TYPICAL VALUES | UNITS             | TEST METHODS |
|---|----------------|-------------------|--------------|
| <b>POLYMER PROPERTIES</b>                     |                |                   |              |
| <b>Melt Flow Rate (MFR) <sup>(1)</sup></b>    |                |                   |              |
| at 190°C and 2.16 kg <sup>(1)</sup>           | 2.1            | g/10 min          | ISO 1133     |
| at 190°C and 5 kg                             | 6.3            | g/10 min          | ISO 1133     |
| <b>Density at 23°C</b>                        | 953            | kg/m <sup>3</sup> | ASTM D1505   |
| <b>Sensoric (Organoleptic Properties)</b>     | Approved       | -                 | SABIC method |
| <b>MECHANICAL PROPERTIES</b>                  |                |                   |              |
| <b>Tensile modulus</b>                        | 1150           | MPa               | ASTM D638    |
| <b>Tensile Strength at Yield</b>              | 30             | MPa               | ASTM D638    |
| <b>Tensile Elongation at Yield</b>            | 10             | %                 | ISO 527-1/-2 |
| <b>ESCR FNCT</b>                              | 10             | h                 | ISO 16770    |
| <b>Charpy Notched Impact Strength (-30°C)</b> | 5              | kJ/m <sup>2</sup> | ISO 179      |
| <b>Hardness (Shore D) <sup>(2)</sup></b>      | 62             | -                 | ASTM D2240   |
| <b>THERMAL PROPERTIES</b>                     |                |                   |              |
| <b>Vicat Softening Temperature</b>            |                |                   |              |
| B/50  | 75             | °C                | ISO 306      |

(1) Typical values: not to be construed as specification limits.

(2) Based on compression molded specimens.

## PROCESSING CONDITIONS

Recommended processing temperatures: 190 - 230°C

## FOOD REGULATION

CC254 is suitable for Food contact application. Detailed information is provided in relevant Material Safety Datasheet and for additional specific: information please contact SABIC local representative for certificate.

## STORAGE AND HANDLING

Polyethylene material should be stored in a manner to prevent a direct exposure to sunlight and/or heat. The storage area should also be dry and preferably don't exceed 50°C. SABIC would not give warranty to bad storage conditions which may lead to quality deterioration such as color change, bad smell and inadequate product performance. It is advisable to process PE resin within 6 months after delivery.



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