## SABIC® HDPE M80064 Series

High Density Polyethylene SABIC Americas, Inc.

## Message:

M80064 is High Density Polyethylene grade with narrow molecular weight distribution suitable for injection molding applications. It has been designed to give good rigidity, toughness and low warpage. M80064 is also available with UV stabilizer as M80064S.

M80064 series grades are recommended for crates, molded cases and trays, industrial pails and other similar products requiring toughness and rigidity.

| General Information                               |                                      |          |             |  |
|---|--------------------------------------|----------|-------------|--|
| Features  | Food Contact Acceptable              |          |             |  |
|   | Good Toughness                       |          |             |  |
|   | High Rigidity                        |          |             |  |
|   | Low Warpage                          |          |             |  |
|   | Narrow Molecular Weight Distribution |          |             |  |
|   |                                      |          |             |  |
| Uses  | Crates                               |          |             |  |
|   | Housings                             |          |             |  |
|   | Industrial Applications              |          |             |  |
|   | Pails                                |          |             |  |
|   |                                      |          |             |  |
| Forms   | Pellets                              |          |             |  |
| Processing Method                                 | Injection Molding                    |          |             |  |
| Physical  | Nominal Value                        | Unit     | Test Method |  |
| Density   | 0.964                                | g/cm³    | ASTM D1505  |  |
| Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)         | 8.0                                  | g/10 min | ASTM D1238  |  |
| Environmental Stress-Cracking Resistance          |                                      |          | ASTM D1693B |  |
| 10% Igepal, Compression Molded, F50               | 2.00                                 | hr       |             |  |
| 100% Igepal, Compression Molded, F50              | 3.00                                 | hr       |             |  |
| Hardness  | Nominal Value                        | Unit     | Test Method |  |
| Durometer Hardness (Shore D, Injection<br>Molded) | 62                                   |          | ASTM D2240  |  |
| Mechanical  | Nominal Value                        | Unit     | Test Method |  |
| Tensile Modulus - 1% Secant (Injection<br>Molded) | 950                                  | MPa      | ASTM D638   |  |
| Tensile Strength                                  |                                      |          | ASTM D638   |  |
| Yield, Injection Molded                           | 26.0                                 | MPa      |             |  |
| Break, Injection Molded                           | 18.0                                 | MPa      |             |  |
| Tensile Elongation (Break, Injection<br>Molded)   | > 800                                | %        | ASTM D638   |  |
| Flexural Modulus (Injection Molded)               | 1000                                 | MPa      | ASTM D790   |  |
| Flexural Strength (Injection Molded)              | 25.0                                 | MPa      | ASTM D790   |  |

| Impact                                 | Nominal Value | Unit | Test Method |
|--|---------------|------|-------------|
| Notched Izod Impact (Injection Molded) | 75            | J/m  | ASTM D256   |
| Thermal                                | Nominal Value | Unit | Test Method |
| Brittleness Temperature                | < -75.0       | °C   | ASTM D746   |
| Vicat Softening Temperature            | 125           | °C   | ASTM D1525  |
| Injection                              | Nominal Value | Unit |             |
| Rear Temperature                       | 200 to 250    | °C   |             |
| Middle Temperature                     | 200 to 250    | °C   |             |
| Front Temperature                      | 200 to 250    | °C   |             |
| Mold Temperature                       | 15.0 to 60.0  | °C   |             |
| Injection Pressure                     | 60.0 to 100   | MPa  |             |

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## Recommended distributors for this material

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