



## Lupolen 5261 Z Q 456

### Polyethylene, High Density

#### Product Description

**Lupolen 5261 Z Q 456** is a high density polyethylene (HDPE) powder with high melt viscosity for ram extrusion of peroxide crosslinked pipes (PE-Xa). It is not intended for medical and pharmaceutical applications.

#### Product Characteristics

|                                      |                                                 |
|--------------------------------------|-------------------------------------------------|
| <b>Status</b>                        | Commercial: Active                              |
| <b>Test Method used</b>              | ISO                                             |
| <b>Availability</b>                  | Europe, North America, Africa-Middle East       |
| <b>Processing Methods</b>            | Extrusion Pipe Sheet and Semi Finished Products |
| <b>Typical Customer Applications</b> | Plumbing, Heating & Cooling                     |

| Typical Properties                             | Method        | Value | Unit              |
|------------------------------------------------|---------------|-------|-------------------|
| <b>Physical</b>                                |               |       |                   |
| Density                                        | ISO 1183      | 0.954 | g/cm <sup>3</sup> |
| Melt flow rate (MFR) (190°C/21.6kg)            | ISO 1133      | 2.0   | g/10 min          |
| <b>Mechanical</b>                              |               |       |                   |
| Tensile Modulus (23 °C, v = 1 mm/min, Secant)  | ISO 527-1, -2 | 1100  | MPa               |
| Tensile Stress at Yield (23 °C, v = 50 mm/min) | ISO 527-1, -2 | 27    | MPa               |
| Tensile Strain at Yield (23 °C, v = 50 mm/min) | ISO 527-1, -2 | 9     | %                 |
| <b>Hardness</b>                                |               |       |                   |
| Shore hardness (Shore D (3 sec))               | ISO 868       | 65    |                   |
| Ball indentation hardness (H 132/30)           | ISO 2039-1    | 52    | MPa               |
| <b>Thermal</b>                                 |               |       |                   |
| Vicat softening temperature                    | ISO 306       |       |                   |
| (VST/A/50 K/h (10 N))                          |               | 132   | °C                |
| (VST/B/50 K/h (50 N))                          |               | 80    | °C                |
| Melting Temperature                            | ISO 3146      | 134   | °C                |

#### Additional Properties

Extrusion Temperature:  
Melt temperatures above 280 °C should be avoided to prevent potential degradation. In case higher temperatures are needed please contact LyondellBasell.

#### Notes

Typical properties; not to be construed as specifications.