



# RIGIDEX<sup>®</sup> K38-20

## Product Technical Information

**RIGIDEX<sup>®</sup> K38-20** is a medium-density polyethylene copolymer designed for the extrusion of non-pressure pipe. **RIGIDEX<sup>®</sup> K38-20** is also suitable for blown film extrusion..

## Benefits & Features

- Natural medium density polyethylene with high stress crack resistance and broad molecular weight distribution.

## Applications

- Non pressure pipes, corrugated pipes, conduits
- Blown film (as pure, in blend or co-extrusion)

| Properties                                            | Conditions                  | Test Methods      | Values | Units             |
|-------------------------------------------------------|-----------------------------|-------------------|--------|-------------------|
| <b>Rheological</b>                                    |                             |                   |        |                   |
| Melt Flow Rate                                        | 190°C/5 kg                  | ISO 1133-1        | 0.85   | g/10min           |
| Melt Flow Rate                                        | 190°C/2.16 kg               | ISO 1133-1        | 0.20   | g/10min           |
| <b>Physical</b>                                       |                             |                   |        |                   |
| Density ISO 1872-1                                    | 23°C                        | ISO 1183-1        | 938    | kg/m <sup>3</sup> |
| <b>Mechanical*</b>                                    |                             |                   |        |                   |
| Tensile Strength at Yield                             | 23°C                        | ISO 527-1,-2      | 19     | MPa               |
| Tensile Strain at Break                               | 23°C, 50 mm/min             | ISO 527-2         | > 350  | %                 |
| Tensile Modulus                                       | 23°C, 1 mm/min              | ISO 527-2         | 600    | MPa               |
| Environmental Stress Cracking Resistance (ESCR)       | -                           | INEOS Test Method | >1000  | h                 |
| <b>Thermal</b>                                        |                             |                   |        |                   |
| Melting Temperature                                   | DSC 2nd heating<br>10°C/min | ISO 11357-3       | 127    | °C                |
| Vicat Softening Temperature                           | 10N                         | ISO306/A50        | 121    | °C                |
| <b>Data should not be used for specification work</b> |                             |                   |        |                   |

\* Values measured on plate

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## Storage

The product should be stored in a dry and dust free environment at temperature below 50°C. Exposure to direct sunlight should be avoided as this may lead to product deterioration.

It is advised to process the product within maximum one year after delivery.

## Regulatory Information

The product and uses described herein may be subject to specific requirements or limitations for use in certain applications like food contact, drinking water or medical devices. Further information may be obtained from the website [www.ineos.com](http://www.ineos.com) where a specific Regulatory Certificate is available for each grade under the heading "SDS & Regulatory Certificate".

Unless specifically indicated, the product mentioned herein is not suitable for applications in the medical or pharmaceutical sectors.

## Health and Safety Information

The product described herein may require precautions in handling. The available product health and safety information for this material is contained in the Safety Data Sheet (SDS) that may be obtained from the website [www.ineos.com](http://www.ineos.com). Before using any material, a customer is advised to consult the SDS for the product under consideration for use.

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