

# Durethan® DP 2131/20 H3.0 000000

Polyamide 6

LANXESS GmbH

## Message:

PA 6, 20 % glass fibers, injection molding, heat-aging stabilized, weather stabilized, improved surface finish

| General Information                                      |                         |                                  |                   |             |
|----------------------------------------------------------|-------------------------|----------------------------------|-------------------|-------------|
| Filler / Reinforcement                                   |                         | Glass Fiber,20% Filler by Weight |                   |             |
| Additive                                                 |                         | Heat Stabilizer                  |                   |             |
| Features                                                 |                         | Good Surface Finish              |                   |             |
|                                                          |                         | Heat Stabilized                  |                   |             |
| Processing Method                                        |                         | Injection Molding                |                   |             |
| Physical                                                 | Dry                     | Conditioned                      | Unit              | Test Method |
| Density (23°C)                                           | 1.28                    | --                               | g/cm <sup>3</sup> | ISO 1183    |
| Apparent Density                                         | 0.70                    | --                               | g/cm <sup>3</sup> | ISO 60      |
| Molding Shrinkage                                        |                         |                                  |                   | ISO 2577    |
| Across Flow : 280°C, 2.00 mm <sup>1</sup>                | 0.70                    | --                               | %                 |             |
| Across Flow : 120°C, 4 hr, 2.00 mm <sup>2</sup>          | 0.20                    | --                               | %                 |             |
| Flow : 280°C, 2.00 mm <sup>3</sup>                       | 0.30                    | --                               | %                 |             |
| Flow : 120°C, 4 hr, 2.00 mm <sup>4</sup>                 | 0.10                    | --                               | %                 |             |
| Mechanical                                               | Dry                     | Conditioned                      | Unit              | Test Method |
| Tensile Modulus (23°C)                                   | 7600                    | 4700                             | MPa               | ISO 527-2/1 |
| Tensile Stress (Break, 23°C)                             | 150                     | 100                              | MPa               | ISO 527-2/5 |
| Tensile Strain (Break, 23°C)                             | 3.0                     | 7.0                              | %                 | ISO 527-2/5 |
| Flexural Modulus <sup>5</sup> (23°C)                     | 6400                    | 4100                             | MPa               | ISO 178/A   |
| Flexural Stress                                          |                         |                                  |                   | ISO 178/A   |
| 3.5% Strain,23°C                                         | 195                     | 110                              | MPa               |             |
| 23°C <sup>6</sup>                                        | 210                     | 130                              | MPa               |             |
| Flexural Strain at Flexural Strength <sup>7</sup> (23°C) | 4.0                     | 6.5                              | %                 | ISO 178/A   |
| ISO Shortname                                            | PA 6, GHR, 14-080, GF20 | --                               |                   | ISO 1874    |
| Residual Moisture Content                                | 0.030 to 0.12           |                                  | %                 | Karl Fisher |
| Impact                                                   | Dry                     | Conditioned                      | Unit              | Test Method |
| Charpy Notched Impact Strength                           |                         |                                  |                   | ISO 179/1eA |
| -30°C                                                    | < 10                    | < 10                             | kJ/m <sup>2</sup> |             |
| 23°C                                                     | < 10                    | < 10                             | kJ/m <sup>2</sup> |             |

|                                    |                             |             |                   |             |
|------------------------------------|-----------------------------|-------------|-------------------|-------------|
| Charpy Unnotched Impact Strength   |                             |             |                   | ISO 179/1eU |
| -30°C                              | 40                          | 40          | kJ/m <sup>2</sup> |             |
| 23°C                               | 45                          | 60          | kJ/m <sup>2</sup> |             |
| Notched Izod Impact Strength       |                             |             |                   | ISO 180/1A  |
| -30°C                              | < 10                        | < 10        | kJ/m <sup>2</sup> |             |
| 23°C                               | < 10                        | < 10        | kJ/m <sup>2</sup> |             |
| Unnotched Izod Impact Strength     |                             |             |                   | ISO 180/1U  |
| -30°C                              | 30                          | 30          | kJ/m <sup>2</sup> |             |
| 23°C                               | 30                          | 45          | kJ/m <sup>2</sup> |             |
| Thermal                            | Dry                         | Conditioned | Unit              | Test Method |
| Heat Deflection Temperature        |                             |             |                   |             |
| 0.45 MPa, Unannealed               | 215                         | --          | °C                | ISO 75-2/B  |
| 1.8 MPa, Unannealed                | 195                         | --          | °C                | ISO 75-2/A  |
| Melting Temperature <sup>8</sup>   | 222                         | --          | °C                | ISO 11357-3 |
| CLTE                               |                             |             |                   | ISO 11359-2 |
| Flow : 23 to 55°C                  | 2.0E-5                      | --          | cm/cm/°C          |             |
| Transverse : 23 to 55°C            | 9.0E-5                      | --          | cm/cm/°C          |             |
| Injection                          | Dry                         | Unit        | Test Method       |             |
| Drying Temperature - Dry Air Dryer | 80.0                        |             | °C                |             |
| Drying Time - Dry Air Dryer        | 2.0 to 6.0                  |             | hr                |             |
| Processing (Melt) Temp             | 270 to 290                  |             | °C                |             |
| Mold Temperature                   | 80.0 to 120                 |             | °C                |             |
| NOTE                               |                             |             |                   |             |
| 1.                                 | 60x60x2mm, 80°C MT, 600 bar |             |                   |             |
| 2.                                 | 60x60x2mm                   |             |                   |             |
| 3.                                 | 60x60x2mm, 80°C MT, 600 bar |             |                   |             |
| 4.                                 | 60x60x2mm                   |             |                   |             |
| 5.                                 | 2.0 mm/min                  |             |                   |             |
| 6.                                 | 2.0 mm/min                  |             |                   |             |
| 7.                                 | 2 mm/min                    |             |                   |             |
| 8.                                 | 10°C/min                    |             |                   |             |

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: [sales@su-jiao.com](mailto:sales@su-jiao.com)

No. 215, Lianhe North Road, Fengxian District, Shanghai, China

