

# Ultraform® S 2320 003 PRO

Acetal (POM) Copolymer

BASF Corporation

## Message:

Ultraform S 2320 003 PRO can be used for functional parts in devices such as insulin pens or powder inhalers as well as for plug in connectors or medical device handles.

| General Information                         |                                 |                        |             |
|---------------------------------------------|---------------------------------|------------------------|-------------|
| Features                                    | Copolymer                       |                        |             |
| Uses                                        | Connectors                      |                        |             |
|                                             | Handles                         |                        |             |
|                                             | Medical/Healthcare Applications |                        |             |
|                                             | Pharmaceuticals                 |                        |             |
| Agency Ratings                              | EC 1907/2006 (REACH)            |                        |             |
| RoHS Compliance                             | RoHS Compliant                  |                        |             |
| Forms                                       | Pellets                         |                        |             |
| Processing Method                           | Injection Molding               |                        |             |
| Physical                                    | Nominal Value                   | Unit                   | Test Method |
| Density                                     | 1.40                            | g/cm <sup>3</sup>      | ISO 1183    |
| Melt Volume-Flow Rate (MVR) (190°C/2.16 kg) | 11.0                            | cm <sup>3</sup> /10min | ISO 1133    |
| Water Absorption                            |                                 |                        | ISO 62      |
| Saturation, 23°C                            | 0.80                            | %                      |             |
| Equilibrium, 23°C, 50% RH                   | 0.20                            | %                      |             |
| Hardness                                    | Nominal Value                   | Unit                   | Test Method |
| Ball Indentation Hardness                   | 145                             | MPa                    | ISO 2039-1  |
| Mechanical                                  | Nominal Value                   | Unit                   | Test Method |
| Tensile Modulus (23°C)                      | 2700                            | MPa                    | ISO 527-2   |
| Tensile Stress (Yield, 23°C)                | 65.0                            | MPa                    | ISO 527-2   |
| Tensile Strain (Yield, 23°C)                | 9.0                             | %                      | ISO 527-2   |
| Nominal Tensile Strain at Break (23°C)      | 28                              | %                      | ISO 527-2   |
| Tensile Creep Modulus (1000 hr)             | 1300                            | MPa                    | ISO 899-1   |
| Impact                                      | Nominal Value                   | Unit                   | Test Method |
| Charpy Notched Impact Strength              |                                 |                        | ISO 179     |
| -30°C                                       | 5.0                             | kJ/m <sup>2</sup>      |             |
| 23°C                                        | 5.5                             | kJ/m <sup>2</sup>      |             |
| Charpy Unnotched Impact Strength            |                                 |                        | ISO 179     |
| -30°C                                       | 170                             | kJ/m <sup>2</sup>      |             |
| 23°C                                        | 180                             | kJ/m <sup>2</sup>      |             |
| Thermal                                     | Nominal Value                   | Unit                   | Test Method |

| Heat Deflection Temperature (1.8 MPa, Unannealed) | 100           | °C       | ISO 75-2/A  |
|---------------------------------------------------|---------------|----------|-------------|
| Melting Temperature (DSC)                         | 167           | °C       | ISO 3146    |
| CLTE - Flow                                       | 1.1E-4        | cm/cm/°C |             |
| Electrical                                        | Nominal Value | Unit     | Test Method |
| Surface Resistivity                               | 1.0E+13       | ohms     | IEC 60093   |
| Volume Resistivity                                | 1.0E+15       | ohms·cm  | IEC 60093   |
| Dielectric Constant (1 MHz)                       | 3.80          |          | IEC 60250   |
| Dissipation Factor (1 MHz)                        | 5.0E-3        |          | IEC 60250   |
| Comparative Tracking Index                        | 600           | V        | IEC 60112   |
| Injection                                         | Nominal Value | Unit     |             |
| Drying Temperature                                | 80.0 to 110   | °C       |             |
| Drying Time                                       | 2.0 to 4.0    | hr       |             |
| Suggested Max Moisture                            | 0.15          | %        |             |
| Processing (Melt) Temp                            | 190 to 230    | °C       |             |
| Mold Temperature                                  | 60.0 to 120   | °C       |             |
| Injection Pressure                                | 3.50 to 7.00  | MPa      |             |

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

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

