

# Hostaform® MT® SlideX™ 1203

Acetal (POM) Copolymer

Celanese Corporation

## Message:

Hostaform® acetal copolymer grade MT® SlideX™ 1203 is a special grade developed for medical industry applications containing low residual monomers and no animal products. Hostaform® MT® SlideX™1203 is a standard flow injection molding grade with tribological modification designed for use in demanding applications that require prevention of audible noise caused by stick-slip phenomenon and low friction and wear against plastics and metals.

| General Information                               |                          |                        |                 |
|---------------------------------------------------|--------------------------|------------------------|-----------------|
| Features                                          | Low friction coefficient |                        |                 |
|                                                   | Good wear resistance     |                        |                 |
|                                                   | No kinetic components    |                        |                 |
| Uses                                              | Medical/nursing supplies |                        |                 |
| RoHS Compliance                                   | Contact manufacturer     |                        |                 |
| 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)       | 13.0                     | cm <sup>3</sup> /10min | ISO 1133        |
| Molding Shrinkage                                 |                          |                        | ISO 294-4       |
| Vertical flow direction                           | 1.7                      | %                      | ISO 294-4       |
| Flow direction                                    | 2.0                      | %                      | ISO 294-4       |
| Water Absorption (Saturation, 23°C)               | 0.60                     | %                      | ISO 62          |
| Mechanical                                        | Nominal Value            | Unit                   | Test Method     |
| Tensile Modulus                                   | 2650                     | MPa                    | ISO 527-2/1A/1  |
| Tensile Stress (Yield)                            | 58.0                     | MPa                    | ISO 527-2/1A/50 |
| Tensile Strain (Yield)                            | 12                       | %                      | ISO 527-2/1A/50 |
| Nominal Tensile Strain at Break                   | 45                       | %                      | ISO 527-2/1A/50 |
| Flexural Modulus (23°C)                           | 2500                     | MPa                    | ISO 178         |
| Impact                                            | Nominal Value            | Unit                   | Test Method     |
| Charpy Notched Impact Strength                    |                          |                        | ISO 179/1eA     |
| -30°C                                             | 6.0                      | kJ/m <sup>2</sup>      | ISO 179/1eA     |
| 23°C                                              | 6.0                      | kJ/m <sup>2</sup>      | ISO 179/1eA     |
| Charpy Unnotched Impact Strength                  |                          |                        | ISO 179/1eU     |
| -30°C                                             | 150                      | kJ/m <sup>2</sup>      | ISO 179/1eU     |
| 23°C                                              | 160                      | kJ/m <sup>2</sup>      | ISO 179/1eU     |
| Thermal                                           | Nominal Value            | Unit                   | Test Method     |
| Heat Deflection Temperature (1.8 MPa, Unannealed) | 93.0                     | °C                     | ISO 75-2/A      |
| Melting Temperature <sup>1</sup>                  | 170                      | °C                     | ISO 11357-3     |

| Linear thermal expansion coefficient                                                           |               |          | ISO 11359-2 |
|------------------------------------------------------------------------------------------------|---------------|----------|-------------|
| Flow                                                                                           | 1.3E-4        | cm/cm/°C | ISO 11359-2 |
| Lateral                                                                                        | 1.3E-4        | cm/cm/°C | ISO 11359-2 |
| Injection                                                                                      | Nominal Value | Unit     |             |
| Drying Temperature                                                                             | 120 - 140     | °C       |             |
| Drying Time                                                                                    | 3.0 - 4.0     | hr       |             |
| Suggested Max Moisture                                                                         | 0.15          | %        |             |
| Hopper Temperature                                                                             | 20.0 - 30.0   | °C       |             |
| Rear Temperature                                                                               | 170 - 180     | °C       |             |
| Middle Temperature                                                                             | 180 - 190     | °C       |             |
| Front Temperature                                                                              | 190 - 200     | °C       |             |
| Nozzle Temperature                                                                             | 190 - 210     | °C       |             |
| Processing (Melt) Temp                                                                         | 190 - 210     | °C       |             |
| Mold Temperature                                                                               | 80.0 - 120    | °C       |             |
| Injection Pressure                                                                             | 60.0 - 120    | MPa      |             |
| Injection Rate                                                                                 | Slow-Moderate |          |             |
| Holding Pressure                                                                               | 60.0 - 120    | MPa      |             |
| Back Pressure                                                                                  | 0.00 - 4.00   | MPa      |             |
| Injection instructions                                                                         |               |          |             |
| Feed Temperature: 60 to 80°CZone 4 Temperature: 190 to 210°CManifold Temperature: 190 to 210°C |               |          |             |
| NOTE                                                                                           |               |          |             |
| 1.                                                                                             | 10°C/min      |          |             |

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