# DESOX™ DSC410F

### Polybutylene Terephthalate

DESCO Co., Ltd.

#### Message:

Descriptions: DESOX<sup>™</sup> DSC410F is one of the brands which made by PBT(Poly Butylene Terephthalate) unfilled resin. It provides good electric property and good mechanical strength.

Applications: DESOX<sup>™</sup> DSC410F is one of the most-used resin for contact lens molds, etc. which request electric property and mechanical property goods.

| General Information               |                             |                   |             |
|-----------------------------------|-----------------------------|-------------------|-------------|
| Features                          | Good electrical performance |                   |             |
|                                   | Good strength               |                   |             |
| Uses                              | Valve/valve components      |                   |             |
|                                   | Connector                   |                   |             |
|                                   | Mold/Mold/Tool              |                   |             |
| Processing Method                 | Injection molding           |                   |             |
| Physical                          | Nominal Value               | Unit              | Test Method |
| Specific Gravity                  | 1.36                        | g/cm <sup>3</sup> | ASTM D792   |
| Molding Shrinkage - Flow          | 1.2 - 1.5                   | %                 |             |
| Hardness                          | Nominal Value               | Unit              | Test Method |
| Rockwell Hardness (R-Scale)       | 120                         |                   | ASTM D785   |
| Mechanical                        | Nominal Value               | Unit              | Test Method |
| Tensile Strength                  | 58.8                        | MPa               | ASTM D638   |
| Tensile Elongation (Break)        | 6.0                         | %                 | ASTM D638   |
| Flexural Modulus                  | 2750                        | MPa               | ASTM D790   |
| Flexural Strength                 | 88.3                        | MPa               | ASTM D790   |
| Impact                            | Nominal Value               | Unit              | Test Method |
| Notched Izod Impact               | 39                          | J/m               | ASTM D256   |
| Thermal                           | Nominal Value               | Unit              | Test Method |
| Deflection Temperature Under Load |                             |                   | ASTM D648   |
| 0.45 MPa, not annealed            | 170                         | °C                | ASTM D648   |
| 1.8 MPa, not annealed             | 70.0                        | °C                | ASTM D648   |
| Melting Temperature               | 222                         | °C                | DSC         |
| Electrical                        | Nominal Value               | Unit              | Test Method |
| Dielectric Strength               | 17                          | kV/mm             | ASTM D149   |
| Arc Resistance                    | 75.0                        | sec               | ASTM D495   |
| Flammability                      | Nominal Value               | Unit              | Test Method |
| Flame Rating                      | V-2                         |                   | UL 94       |
| Injection                         | Nominal Value               | Unit              |             |
| Drying Temperature                | 60.0 - 80.0                 | °C                |             |

| Drying Time            | 3.0 - 5.0   | hr |
|------------------------|-------------|----|
| Suggested Max Moisture | < 0.20      | %  |
| Rear Temperature       | 230 - 240   | °C |
| Middle Temperature     | 235 - 245   | °C |
| Front Temperature      | 240 - 260   | °C |
| Nozzle Temperature     | 240 - 260   | °C |
| Processing (Melt) Temp | 240 - 260   | °C |
| Mold Temperature       | 40.0 - 80.0 | °C |
| Injection instructions |             |    |

Speed: 40 to 70%Pressure 1st: 30 to 60%Pressure 2nd: 30 to 60Holding Pressure: 10 to 20%

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

