

# TPSiV™ 4000-50A

Thermoplastic Silicone Vulcanizate  
Multibase, A Dow Corning Company

## Message:

TPSiV® 4000-50A Thermoplastic Elastomer is a UV stable, colorable, thermoplastic elastomer with excellent bonding to Polycarbonate, ABS, and similar polar substrates.

| General Information                       |                                    |                   |             |
|-------------------------------------------|------------------------------------|-------------------|-------------|
| Features                                  | Bondability                        |                   |             |
|                                           | Good Abrasion Resistance           |                   |             |
|                                           | Good Colorability                  |                   |             |
|                                           | Good UV Resistance                 |                   |             |
|                                           | Low Friction                       |                   |             |
|                                           | Scratch Resistant                  |                   |             |
|                                           | Soft                               |                   |             |
| Uses                                      | Communication Applications         |                   |             |
|                                           | Computer Components                |                   |             |
|                                           | Electrical/Electronic Applications |                   |             |
|                                           | Overmolding                        |                   |             |
| Forms                                     | Pellets                            |                   |             |
| Physical                                  | Nominal Value                      | Unit              | Test Method |
| Density                                   | 1.12                               | g/cm <sup>3</sup> | ISO 1183    |
| Melt Mass-Flow Rate (MFR) (190°C/10.0 kg) | 56                                 | g/10 min          | ISO 1133    |
| Molding Shrinkage                         | 2.0 to 4.0                         | %                 |             |
| Hardness                                  | Nominal Value                      | Unit              | Test Method |
| Shore Hardness (Shore A, 15 sec)          | 48                                 |                   | ISO 868     |
| Mechanical                                | Nominal Value                      | Unit              | Test Method |
| Flexural Modulus                          | 14.0                               | MPa               | ISO 178     |
| Flexural Stress                           | 0.740                              | MPa               | ISO 178     |
| Taber Abrasion Resistance (1000 Cycles)   | 155                                | mg                | ASTM D1044  |
| Elastomers                                | Nominal Value                      | Unit              | Test Method |
| Tensile Stress (100% Strain)              | 1.50                               | MPa               | ISO 37      |
| Tensile Stress (Yield)                    | 4.40                               | MPa               | ISO 37      |
| Tensile Elongation (Break)                | 710                                | %                 | ISO 37      |
| Tear Strength                             | 20                                 | kN/m              | ISO 34-1    |
| Compression Set                           |                                    |                   | ISO 815     |
| 23°C, 22 hr                               | 25                                 | %                 |             |
| 70°C, 22 hr                               | 77                                 | %                 |             |

| Injection              | Nominal Value | Unit |
|------------------------|---------------|------|
| Drying Temperature     | 65.0 to 80.0  | °C   |
| Drying Time            | 2.0 to 4.0    | hr   |
| Rear Temperature       | 150 to 160    | °C   |
| Middle Temperature     | 155 to 165    | °C   |
| Front Temperature      | 160 to 170    | °C   |
| Nozzle Temperature     | 170 to 190    | °C   |
| Processing (Melt) Temp | 180           | °C   |
| Mold Temperature       | 20.0 to 40.0  | °C   |
| Injection Rate         | Moderate-Fast |      |

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

