

# ABSCOM® FR1000

Acrylonitrile Butadiene Styrene

Polymer Compounders Limited

## Message:

ABSCOM FR1000 is a flame retardant ABS grade with a UL94 rating tested to V0 at 1.5mm. Typical applications include electrical enclosures and safety equipment.

| General Information                      |                                    |                   |              |
|------------------------------------------|------------------------------------|-------------------|--------------|
| Features                                 | Flame Retardant                    |                   |              |
| Uses                                     | Electrical/Electronic Applications |                   |              |
|                                          | Safety Equipment                   |                   |              |
| Forms                                    | Pellets                            |                   |              |
| Processing Method                        | Injection Molding                  |                   |              |
| Physical                                 | Nominal Value                      | Unit              | Test Method  |
| Density                                  | 1.18                               | g/cm <sup>3</sup> | ISO 1183     |
| Melt Mass-Flow Rate (MFR) (220°C/5.0 kg) | 16                                 | g/10 min          | ISO 1133     |
| Molding Shrinkage                        | 0.40 to 0.70                       | %                 | ISO 294-4    |
| Water Absorption                         |                                    |                   | ISO 62       |
| Saturation, 23°C                         | 1.0                                | %                 |              |
| Equilibrium, 23°C, 50% RH                | 0.22                               | %                 |              |
| Mechanical                               | Nominal Value                      | Unit              | Test Method  |
| Tensile Modulus                          | 2700                               | MPa               | ISO 527-2/1  |
| Tensile Stress (Yield)                   | 35.0                               | MPa               | ISO 527-2/50 |
| Tensile Strain                           |                                    |                   |              |
| Yield                                    | 2.1                                | %                 | ISO 527-2/50 |
| Break                                    | 10                                 | %                 | ISO 527-2    |
| Flexural Stress                          | 70.0                               | MPa               | ISO 178      |
| Impact                                   | Nominal Value                      | Unit              | Test Method  |
| Charpy Notched Impact Strength (23°C)    | 60                                 | kJ/m <sup>2</sup> | ISO 179/1eA  |
| Charpy Unnotched Impact Strength (23°C)  | 150                                | kJ/m <sup>2</sup> | ISO 179/1eU  |
| Notched Izod Impact Strength (23°C)      | 15                                 | kJ/m <sup>2</sup> | ISO 180/1A   |
| Thermal                                  | Nominal Value                      | Unit              | Test Method  |
| Heat Deflection Temperature              |                                    |                   |              |
| 0.45 MPa, Unannealed                     | 81.0                               | °C                | ISO 75-2/B   |
| 1.8 MPa, Unannealed                      | 74.0                               | °C                | ISO 75-2/A   |
| Vicat Softening Temperature              | 88.0                               | °C                | ISO 306/B50  |
| CLTE - Flow                              | 8.0E-5                             | cm/cm/°C          | ISO 11359-2  |
| Flammability                             | Nominal Value                      |                   | Test Method  |
| Flame Rating                             |                                    |                   | UL 94        |

| 0.800 mm               | V-2           |        |
|------------------------|---------------|--------|
| 1.50 mm                | V-0           |        |
| Injection              | Nominal Value | Unit   |
| Drying Temperature     | 75.0          | °C     |
| Drying Time            | 2.0 to 4.0    | hr     |
| Processing (Melt) Temp | 220           | °C     |
| Mold Temperature       | 60.0          | °C     |
| Injection Velocity     | 60            | mm/sec |

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

