

# Bakelite® PF 2137

Phenolic

Hexion Inc.

## Message:

### Product Description

Phenolic moulding compound, inorganically/organically filled, increased heat resistance, minimal distortion, dishwasher proof

### Application Areas

Iron heat shield, fittings for ovens, dishwashers and toilet seats

| General Information                     |                      |                   |             |
|-----------------------------------------|----------------------|-------------------|-------------|
| Filler / Reinforcement                  | Organic\Inorganic    |                   |             |
| Features                                | Good Surface Finish  |                   |             |
| Uses                                    | Appliance Components |                   |             |
|                                         | Fittings             |                   |             |
| Processing Method                       | Compression Molding  |                   |             |
|                                         | Injection Molding    |                   |             |
| Physical                                | Nominal Value        | Unit              | Test Method |
| Density (23°C)                          | 1.43                 | g/cm <sup>3</sup> | ISO 1183    |
| Apparent Density                        | 0.65                 | g/cm <sup>3</sup> | ISO 60      |
| Molding Shrinkage                       |                      |                   | ISO 2577    |
| -- <sup>1</sup>                         | 0.45                 | %                 |             |
| -- <sup>2</sup>                         | 0.80                 | %                 |             |
| Water Absorption - 24h/23C              | 45.0                 | mg                | ISO 62      |
| Post Shrinkage                          |                      |                   | ISO 2577    |
| -- <sup>3</sup>                         | 0.55                 | %                 |             |
| -- <sup>4</sup>                         | 0.35                 | %                 |             |
| Compression Molding Molding Pressure    | > 15.0               | MPa               |             |
| Compression Molding Temperature         | 160 to 190           | °C                |             |
| Hardness                                | Nominal Value        | Unit              | Test Method |
| Ball Indentation Hardness (H 961/30)    | 350                  | MPa               | ISO 2039-1  |
| Mechanical                              | Nominal Value        | Unit              | Test Method |
| Flexural Modulus                        | 7500                 | MPa               | ISO 178     |
| Flexural Stress <sup>5</sup>            | 100                  | MPa               | ISO 178     |
| Compressive Stress                      | 250                  | MPa               | ISO 604     |
| Impact                                  | Nominal Value        | Unit              | Test Method |
| Charpy Notched Impact Strength (23°C)   | 1.7                  | kJ/m <sup>2</sup> | ISO 179/1eA |
| Charpy Unnotched Impact Strength (23°C) | 7.0                  | kJ/m <sup>2</sup> | ISO 179/1eU |
| Thermal                                 | Nominal Value        | Unit              | Test Method |

| Heat Deflection Temperature (8.0 MPa, Unannealed) | 125                                                                                       | °C      | ISO 75-2/C  |
|---------------------------------------------------|-------------------------------------------------------------------------------------------|---------|-------------|
| Electrical                                        | Nominal Value                                                                             | Unit    | Test Method |
| Surface Resistivity                               | 1.0E+10                                                                                   | ohms    | IEC 60093   |
| Volume Resistivity                                | 1.0E+11                                                                                   | ohms·cm | IEC 60093   |
| Electric Strength <sup>6</sup> (1.00 mm)          | 27                                                                                        | kV/mm   | IEC 60243-1 |
| Relative Permittivity (100 Hz)                    | 8.50                                                                                      |         | IEC 60250   |
| Dissipation Factor (100 Hz)                       | 0.25                                                                                      |         | IEC 60250   |
| Comparative Tracking Index (Solution A)           | 125                                                                                       | V       | IEC 60112   |
| Injection                                         | Nominal Value                                                                             | Unit    |             |
| Rear Temperature                                  | 60.0 to 75.0                                                                              | °C      |             |
| Nozzle Temperature                                | 80.0 to 100                                                                               | °C      |             |
| Processing (Melt) Temp                            | 80.0 to 100                                                                               | °C      |             |
| Mold Temperature                                  | 160 to 190                                                                                | °C      |             |
| Injection Pressure                                | > 15.0                                                                                    | MPa     |             |
| Back Pressure                                     | 0.500 to 2.00                                                                             | MPa     |             |
| NOTE                                              |                                                                                           |         |             |
| 1.                                                | Compression                                                                               |         |             |
| 2.                                                | Injection                                                                                 |         |             |
| 3.                                                | Injection                                                                                 |         |             |
| 4.                                                | Compression                                                                               |         |             |
| 5.                                                | 2.0 mm/min                                                                                |         |             |
| 6.                                                | short term, electrode layout<br>P25mm/P25mm in transformer oil<br>equivalent to IEC 60296 |         |             |

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



WECHAT