# LUCITE® SuperTuf™ ST50G6

### Polymethyl Methacrylate Acrylic

Lucite International Inc.

#### Message:

LUCITE® SuperTuf™ST50G6 is a polymethyl methacrylate-acrylic material. This product is available in North America and is processed by extrusion or injection molding.

LUCITE® SuperTuf™The main features of ST50G6 are:

flame retardant/rated flame

Good toughness

Impact resistance

good weather resistance

Typical application areas include:

Electrical/electronic applications

electrical appliances

General Information

House

| Features                                 | Impact resistance, high            |          |             |  |
|--|------------------------------------|----------|-------------|--|
|  | Good liquidity                     |          |             |  |
|  | Good weather resistance            |          |             |  |
|  | Good toughness                     |          |             |  |
|  |                                    |          |             |  |
| Uses                                     | Electrical/Electronic Applications |          |             |  |
|  | Electrical appliances              |          |             |  |
|  | Shell                              |          |             |  |
|  |                                    |          |             |  |
| Forms                                    | Particle                           |          |             |  |
| Processing Method                        | Extrusion                          |          |             |  |
|  | Injection molding                  |          |             |  |
|  |                                    |          |             |  |
| Physical                                 | Nominal Value                      | Unit     | Test Method |  |
| Density                                  | 1.00                               | g/cm³    | ISO 1183    |  |
| Melt Mass-Flow Rate (MFR) (230°C/3.8 kg) | 11                                 | g/10 min | ASTM D1238  |  |
| Hardness                                 | Nominal Value                      | Unit     | Test Method |  |
| Rockwell Hardness (M-Scale)              | 20                                 |          | ASTM D785   |  |
| Mechanical                               | Nominal Value                      | Unit     | Test Method |  |
| Tensile Modulus                          | 1450                               | MPa      | ASTM D638   |  |
| Tensile Stress (Yield)                   | 36.0                               | MPa      | ISO 527-2   |  |
| Tensile Strain (Break)                   | 40                                 | %        | ISO 527-2   |  |
| Flexural Modulus                         | 1300                               | МРа      | ISO 178     |  |
| Flexural Stress                          | 45.0                               | МРа      | ISO 178     |  |
| Impact                                   | Nominal Value                      | Unit     | Test Method |  |
| Notched Izod Impact                      | 96                                 | J/m      | ASTM D256   |  |

| Dart Drop Impact                                     | 9.04          | J    | ASTM D3029  |
|--|---------------|------|-------------|
| Thermal  | Nominal Value | Unit | Test Method |
| Heat Deflection Temperature (1.8 MPa,<br>Unannealed) | 83.9          | °C   | ISO 75-2/A  |
| Vicat Softening Temperature                          | 93.9          | °C   | ISO 306/A   |
| Flammability   | Nominal Value |      | Test Method |
| Flame Rating   | НВ            |      | UL 94       |
| Optical  | Nominal Value | Unit | Test Method |
| Transmittance  | 89.0          | %    | ASTM D1003  |
| Haze   | 2.0           | %    | ASTM D1003  |
| Yellowness Index                                     | 1.0           | YI   | ASTM D1925  |
| Injection  | Nominal Value | Unit |             |
| Drying Temperature                                   | 65.6 - 73.9   | °C   |             |
| Rear Temperature                                     | 216           | °C   |             |
| Middle Temperature                                   | 224           | °C   |             |
| Front Temperature                                    | 232           | °C   |             |
| Nozzle Temperature                                   | 238           | °C   |             |
| Processing (Melt) Temp                               | 210 - 260     | °C   |             |
| Mold Temperature                                     | 48.9 - 79.4   | °C   |             |
| Injection instructions                               |               |      |             |

Heated Manifold: 465°FHeated Drop (Sprue): 470°F

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#### Recommended distributors for this material

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