

# AKROMID® B3 GF 15 RM-M natural (3697)

Polyamide 6  
AKRO-PLASTIC GmbH

Message:

AKROMID® B3 GF 15 RM-M natural (3697) is a 15% glass fibre reinforced polyamide 6 with average stiffness and strength, limited moisture absorption and light inherent color.  
Applications are housings and other dimensional stable parts in the automotive and electronic industry

| General Information                  |      |                                    |                   |                 |
|--------------------------------------|------|------------------------------------|-------------------|-----------------|
| Filler / Reinforcement               |      | Glass Fiber,15% Filler by Weight   |                   |                 |
| Features                             |      | Good Dimensional Stability         |                   |                 |
|                                      |      | Good Stiffness                     |                   |                 |
|                                      |      | Low Moisture Absorption            |                   |                 |
|                                      |      | Medium Strength                    |                   |                 |
| Uses                                 |      | Automotive Applications            |                   |                 |
|                                      |      | Electrical/Electronic Applications |                   |                 |
|                                      |      | Housings                           |                   |                 |
| Appearance                           |      | Natural Color                      |                   |                 |
| Resin ID (ISO 1043)                  |      | PA6 + X GF15                       |                   |                 |
| Physical                             | Dry  | Conditioned                        | Unit              | Test Method     |
| Density (23°C)                       | 1.28 | --                                 | g/cm <sup>3</sup> | ISO 1183        |
| Spiral Flow                          | 88.0 | --                                 | cm                | Internal Method |
| Molding Shrinkage                    |      |                                    |                   | ISO 294-4       |
| Across Flow                          | 0.90 | --                                 | %                 |                 |
| Flow                                 | 0.50 | --                                 | %                 |                 |
| Humidity Absorption - 62% RH (70°C)  | 2.2  | --                                 | %                 | ISO 1110        |
| Reinforcement Content                | 15   | --                                 | %                 | ISO 1172        |
| Hardness                             | Dry  | Conditioned                        | Unit              | Test Method     |
| Ball Indentation Hardness (H 961/30) | 180  | --                                 | MPa               | ISO 2039-1      |
| Mechanical                           | Dry  | Conditioned                        | Unit              | Test Method     |
| Tensile Modulus                      | 6200 | 4200                               | MPa               | ISO 527-2/1     |
| Tensile Stress (Break)               | 125  | 85.0                               | MPa               | ISO 527-2/5     |
| Tensile Strain (Break)               | 3.0  | 4.5                                | %                 | ISO 527-2/5     |
| Flexural Modulus <sup>1</sup>        | 4800 | --                                 | MPa               | ISO 178         |
| Flexural Stress <sup>2</sup>         | 190  | --                                 | MPa               | ISO 178         |
| Impact                               | Dry  | Conditioned                        | Unit              | Test Method     |
| Charpy Notched Impact Strength       |      |                                    |                   | ISO 179/1eA     |

|                                                   |               |             |                   |                |
|---------------------------------------------------|---------------|-------------|-------------------|----------------|
| -30°C                                             | 7.0           | 7.0         | kJ/m <sup>2</sup> |                |
| 23°C                                              | 7.0           | 8.0         | kJ/m <sup>2</sup> |                |
| Charpy Unnotched Impact Strength                  |               |             |                   | ISO 179/1eU    |
| -30°C                                             | 40            | 40          | kJ/m <sup>2</sup> |                |
| 23°C                                              | 45            | 50          | kJ/m <sup>2</sup> |                |
| Thermal                                           | Dry           | Conditioned | Unit              | Test Method    |
| Heat Deflection Temperature (1.8 MPa, Unannealed) | 200           | --          | °C                | ISO 75-2/A     |
| Melting Temperature <sup>3</sup>                  | 225           | --          | °C                | DIN EN 11357-1 |
| Electrical                                        | Dry           | Conditioned | Unit              | Test Method    |
| Comparative Tracking Index (Solution A)           | 600           | --          | V                 | IEC 60112      |
| Flammability                                      | Dry           | Conditioned | Unit              | Test Method    |
| Burning Rate <sup>4</sup> (1.00 mm)               | < 100         | --          | mm/min            | FMVSS 302      |
| Flame Rating (0.800 mm)                           | HB            | --          |                   | UL 94          |
| NOTE                                              |               |             |                   |                |
| 1.                                                | 2.0 mm/min    |             |                   |                |
| 2.                                                | 2.0 mm/min    |             |                   |                |
| 3.                                                | 10 K/min, DSC |             |                   |                |
| 4.                                                | > 1 mm        |             |                   |                |

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

