

# FRIANYL® XT4 GF30 VOXI

Polyphthalamide

Nilit Plastics

## Message:

PPA FLAME RETARDANT COMPOUND

DESIGNED FOR E&E APPLICATIONS WITH THERMAL REQUIREMENTS SIGNIFICANTLY HIGHER THAN THOSE OF POLYAMIDE 6.6

HIGH STIFFNESS AND STRENGTH AT ELEVATED TEMPERATURES

HIGH DIMENSIONAL STABILITY

EXCELLENT CREEP RESISTANCE

RESISTANCE TO CHEMICALS AND HYDROLYSIS

PPA, 30% GLASS FIBER REINFORCED, FLAME RETARDANT V0, PBB AND PBDE FREE

| General Information                                            |         |                                                       |                   |             |
|----------------------------------------------------------------|---------|-------------------------------------------------------|-------------------|-------------|
| Filler / Reinforcement                                         |         | Glass fiber reinforced material, 30% filler by weight |                   |             |
| Features                                                       |         | Flame retardancy                                      |                   |             |
| Physical                                                       | Dry     | Conditioned                                           | Unit              | Test Method |
| Density (23°C)                                                 | 1.67    | --                                                    | g/cm <sup>3</sup> | ISO 1183    |
| Molding Shrinkage                                              |         |                                                       |                   | ISO 294-4   |
| Transverse flow: 23°C                                          | 0.70    | --                                                    | %                 | ISO 294-4   |
| Flow: 23°C                                                     | 0.20    | --                                                    | %                 | ISO 294-4   |
| Water Absorption                                               |         |                                                       |                   | ISO 62      |
| 23°C, 24 hr                                                    | 2.5     | --                                                    | %                 | ISO 62      |
| Saturated, 23°C                                                | 0.20    | --                                                    | %                 | ISO 62      |
| Mechanical                                                     | Dry     | Conditioned                                           | Unit              | Test Method |
| Tensile Modulus (23°C)                                         | 12500   | 12500                                                 | MPa               | ISO 527-2   |
| Tensile Stress (Yield, 23°C)                                   | 180     | 170                                                   | MPa               | ISO 527-2   |
| Tensile Strain (Break, 23°C)                                   | 2.0     | 2.0                                                   | %                 | ISO 527-2   |
| Impact                                                         | Dry     | Conditioned                                           | Unit              | Test Method |
| Charpy Notched Impact Strength (23°C)                          | 6.5     | --                                                    | kJ/m <sup>2</sup> | ISO 179/1eA |
| Charpy Unnotched Impact Strength                               |         |                                                       |                   | ISO 179/1eU |
| -30°C                                                          | 38      | --                                                    | kJ/m <sup>2</sup> | ISO 179/1eU |
| 23°C                                                           | 40      | 40                                                    | kJ/m <sup>2</sup> | ISO 179/1eU |
| Notched Izod Impact (23°C)                                     | 6.5     | 6.5                                                   | kJ/m <sup>2</sup> | ISO 180/A   |
| Thermal                                                        | Dry     | Conditioned                                           | Unit              | Test Method |
| Heat Deflection Temperature <sup>1</sup> (1.8 MPa, Unannealed) | 280     | --                                                    | °C                | ISO 75-2/A  |
| Continuous Use Temperature <sup>2</sup>                        | 130     | --                                                    | °C                | IEC 60216   |
| Electrical                                                     | Dry     | Conditioned                                           | Unit              | Test Method |
| Surface Resistivity <sup>3</sup>                               | 1.0E+13 | --                                                    | ohms              | IEC 60093   |

|                                                  |          |             |         |                |
|--------------------------------------------------|----------|-------------|---------|----------------|
| Volume Resistivity (23°C)                        | 1.0E+17  | --          | ohms·cm | IEC 60093      |
| Dielectric Strength (2.00 mm)                    | 24       | --          | kV/mm   | IEC 60243-1    |
| Comparative Tracking Index (3.20 mm, Solution A) | 450      | --          | V       | IEC 60112      |
| Flammability                                     | Dry      | Conditioned | Unit    | Test Method    |
| Flame Rating                                     |          |             |         | UL 94          |
| 0.40 mm                                          | V-2      | --          |         | UL 94          |
| 0.8 mm                                           | V-0      | --          |         | UL 94          |
| 1.6 mm                                           | V-0      | --          |         | UL 94          |
| 3.2 mm                                           | V-0      | --          |         | UL 94          |
| Glow Wire Flammability Index                     |          |             |         | IEC 60695-2-12 |
| 0.8 mm                                           | 960      | --          | °C      | IEC 60695-2-12 |
| 3.2 mm                                           | 960      | --          | °C      | IEC 60695-2-12 |
| Glow Wire Ignition Temperature                   |          |             |         | IEC 60695-2-13 |
| 0.8 mm                                           | 850      | --          | °C      | IEC 60695-2-13 |
| 3.2 mm                                           | 875      | --          | °C      | IEC 60695-2-13 |
| NOTE                                             |          |             |         |                |
| 1.                                               | Method B |             |         |                |
| 2.                                               | 20000 hr |             |         |                |
| 3.                                               | 23°C     |             |         |                |

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

