# Glastic® UTR

### Thermoset Polyester

**Glastic Corporation** 

#### Message:

Glastic UTR 1494 is a fiberglass reinforced thermoset polyester material. It is available in sheet form as well as a wide selection of channel, angle, and tube sizes. These materials are the industry standard for flame and arc/track resistant electrical insulation. In addition, the excellent combination of high strength, flame resistance, and low smoke generation has given it application in many other areas such as transit and marine where safe, yet economical materials are required.

| General Information               |                                 |          |             |  |  |
|-----------------------------------|---------------------------------|----------|-------------|--|--|
| Filler / Reinforcement            | Glass fiber reinforced material |          |             |  |  |
| Features                          | Low smoke                       |          |             |  |  |
|                                   | High strength                   |          |             |  |  |
|                                   | Anti-arc                        |          |             |  |  |
|                                   | Track Resistance                |          |             |  |  |
|                                   | Flame retardancy                |          |             |  |  |
| Uses                              | Laminate                        |          |             |  |  |
|                                   | Ship application                |          |             |  |  |
|                                   | Electronic insulation           |          |             |  |  |
|                                   | Industrial application          |          |             |  |  |
|                                   | Sheet                           |          |             |  |  |
|                                   |                                 |          |             |  |  |
| UL File Number                    | E81928                          |          |             |  |  |
| Appearance                        | Red                             |          |             |  |  |
| Forms                             | Particle                        |          |             |  |  |
| Physical                          | Nominal Value                   | Unit     | Test Method |  |  |
| Specific Gravity                  | 1.81                            | g/cm³    | ASTM D792   |  |  |
| Water Absorption (24 hr)          | 0.40                            | %        | ASTM D570   |  |  |
| Mechanical                        | Nominal Value                   | Unit     | Test Method |  |  |
| Tensile Strength (yield, 1.60mm)  | 53.8                            | MPa      | ASTM D638   |  |  |
| Flexural Strength (yield, 1.60mm) | 152                             | MPa      | ASTM D790   |  |  |
| Compressive Strength (1.60 mm)    | 228                             | MPa      | ASTM D695   |  |  |
| Shear Strength                    | 80.0                            | MPa      | ASTM D732   |  |  |
| Impact                            | Nominal Value                   | Unit     | Test Method |  |  |
| Notched Izod Impact               | 480                             | J/m      | ASTM D256   |  |  |
| Thermal                           | Nominal Value                   | Unit     | Test Method |  |  |
| CLTE - Flow (1.60 mm)             | 2.0E-5                          | cm/cm/°C | ASTM D696   |  |  |
| Thermal Conductivity              | 0.27                            | W/m/K    | ASTM C177   |  |  |
| RTI Elec (1.60 mm)                | 130                             | °C       | UL 746      |  |  |
| RTI (1.60 mm)                     | 160                             | °C       | UL 746      |  |  |

| Nominal Value                      | Unit   | Test Method                             |
|------------------------------------|--|---|
|                                    |  | ASTM D149                               |
| 18                                 | kV/mm  | ASTM D149                               |
| 23                                 | kV/mm  | ASTM D149                               |
|                                    |  | ASTM D150                               |
| 0.013                              |  | ASTM D150                               |
| 0.010                              |  | ASTM D150                               |
| 180                                | sec  | ASTM D495                               |
| 50                                 |  |   |
| 500                                | V  | UL 746                                  |
| Nominal Value                      | Unit   | Test Method                             |
| НВ                                 |  | UL 94                                   |
| 35                                 | %  | ASTM D2863                              |
|                                    |  |   |
| on Resistance, ASTM D257: 3.1e12 o | hmsFlame Rating, UL 94, over .063 i  | n: V-Olgnition Time: 85 minBurn Time: 4 |
|                                    | 18    23    0.013    0.010    180    0    500    Nominal Value    HB    35 | 18  kV/mm    23  kV/mm    0.013         |

1.

Method A (short time)

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

