

## TRIEX® Compound NH3022S

Samyang Corporation - Polycarbonate

### General Information

#### Product Description

Polycarbonates provides excellent mechanical properties, dimensional stability, and good electrical property. Widely used in various industrial fields such as electronics, automobiles.

#### General

|                 |                                      |                       |                 |
|-----------------|--------------------------------------|-----------------------|-----------------|
| Material Status | • Commercial: Active                 |                       |                 |
| Availability    | • Asia Pacific                       | • Europe              | • North America |
| Features        | • Flame Retardant                    |                       |                 |
| Uses            | • Electrical/Electronic Applications | • Television Housings |                 |
| Forms           | • Pellets                            |                       |                 |

### Properties <sup>1</sup>

| Physical                                                | Nominal Value    | Unit     | Test Method |
|---------------------------------------------------------|------------------|----------|-------------|
| Density / Specific Gravity                              | 1.21             |          | ASTM D792   |
| Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)                | 40               | g/10 min | ASTM D1238  |
| Molding Shrinkage - Flow                                | 5.0E-3 to 7.0E-3 | in/in    | ASTM D955   |
| Water Absorption (24 hr, 73°F)                          | 0.15             | %        | ASTM D570   |
| Mechanical                                              | Nominal Value    | Unit     | Test Method |
| Tensile Strength (Yield)                                | 10200            | psi      | ASTM D638   |
| Tensile Elongation (Break)                              | 100              | %        | ASTM D638   |
| Flexural Modulus                                        | 348000           | psi      | ASTM D790   |
| Flexural Strength (Yield)                               | 14900            | psi      | ASTM D790   |
| Impact                                                  | Nominal Value    | Unit     | Test Method |
| Notched Izod Impact (73°F, 0.125 in)                    | 0.73             | ft·lb/in | ASTM D256   |
| Hardness                                                | Nominal Value    | Unit     | Test Method |
| Rockwell Hardness (R-Scale)                             | 120              |          | ASTM D785   |
| Thermal                                                 | Nominal Value    | Unit     | Test Method |
| Deflection Temperature Under Load (264 psi, Unannealed) | 203              | °F       | ASTM D648   |
| CLTE - Flow                                             | 3.1E-5           | in/in/°F | ASTM D696   |
| Electrical                                              | Nominal Value    | Unit     | Test Method |
| Volume Resistivity                                      | 4.0E+16          | ohms·cm  | ASTM D257   |
| Dielectric Strength                                     | 760              | V/mil    | ASTM D149   |
| Dielectric Constant                                     | 2.85             |          | ASTM D150   |
| Dissipation Factor                                      | 9.2E-3           |          | ASTM D150   |
| Arc Resistance                                          | 120              | sec      | ASTM D495   |
| Flammability                                            | Nominal Value    | Unit     | Test Method |
| Flame Rating (0.06 in)                                  | V-2              |          | UL 94       |

