

**PHYSICAL PROPERTIES OF starex General ABS HF-0660I**

| Properties at 23°C                            | Test Method | Test Condition           | Unit                            | Value                    |
|---|-------------|--------------------------|---------------------------------|--------------------------|
| <b>Physical Properties</b>                    |             |                          |                                 |                          |
| Specific Gravity                              | ASTM D792   | Natural Color            |                                 | 1.06                     |
| Water Absorption                              | ASTM D570   | 24hr,immersion in water  | %                               |                          |
| Melt Flow Index                               | ASTM D1238  | 200°C/5kg                | g/10min                         | 3.8                      |
|   |             | 220°C/10kg               | g/10min                         | 38.4                     |
|   |             | 230°C/3.8kg              | g/10min                         |                          |
| Mold Shrinkage                                | ASTM D955   |                          | %                               | -                        |
| Gloss   | ASTM D523   |                          | %                               | 110                      |
| <b>Mechanical Properties</b>                  |             |                          |                                 |                          |
| Tensile Strength                              | ASTM D638   | 5mm/min                  | MPa(psi)<br>kgf/cm <sup>2</sup> | 42(6,100)<br>433         |
| Elongation at Break                           | ASTM D638   | 5mm/min                  | %                               | 26                       |
| Flexural Strength                             | ASTM D790   | 2.8mm/min                | MPa(psi)<br>kgf/cm <sup>2</sup> | 61(8,800)<br>620         |
| Flexural Modulus                              | ASTM D790   | 2.8mm/min                | MPa(psi)<br>kgf/cm <sup>2</sup> | 2,200(320,000)<br>22,200 |
| Izod Impact Strength (notched)                | ASTM D256   | 1/4 inch                 | J/m(ft.lbf/in)<br>kgf/cm/cm     | 196(3.7)<br>20           |
| Rockwell Hardness                             | ASTM D785   | R-scale                  | -                               | 106                      |
| <b>Thermal Properties</b>                     |             |                          |                                 |                          |
| Heat Deflection Temperature (unannealed),1/4" | ASTM D648   | 18.56kgf/cm <sup>2</sup> | °F                              | 185                      |
|   |             |                          | °C                              | 85                       |
| Vicat Softening Temperature (unannealed)      | ISO R 306   | 5kg                      | °F                              | 205                      |
|   |             |                          | °C                              | 96                       |
| <b>Flammability</b>                           |             |                          |                                 |                          |
| UL 94 Classification                          | UL94        | 1.5mm specimen           | Recognized                      | HB                       |
|   |             | 3.0mm specimen           | Recognized                      | HB                       |
|   |             | 6.0mm specimen           | Recognized                      | HB                       |
| UV Resistance                                 | ASTM D4459  | 300Hr Ivory Color        | Delta E                         |                          |

\* The above values are only the representatives of natural color specimen, not for guarantee

\* last updated : April. 14, 2003