

## DATASHEET COMPARISON

### ASTM Property


**ASTM Property**

ISO Property



|                |            |         |
|----------------|------------|---------|
| <b>starex®</b> | Grade      | VG-4910 |
|                | Resin Type | ABS/GF  |

OA Machine

| Item                          | Measuring Method | Condition                        | Unit                | Value       |
|-------------------------------|------------------|----------------------------------|---------------------|-------------|
| <b>Physical</b>               |                  |                                  |                     |             |
| Specific Gravity              | ASTM D792        | Natural or representative color  | -                   | 1.12        |
| Melt Flow Index               | ASTM D1238       | 220l, 10kg                       | g/10min             | 23          |
| Mold Shrinkage(MD)            | ASTM D955        | Flow at 3.2mm(MD)                | %                   | 0.1-0.3     |
| <b>Mechanical</b>             |                  |                                  |                     |             |
| Tensile Strength at Yield     | ASTM D638        | 5mm/min                          | kgf/cm <sup>2</sup> | 750         |
| Tensile Strain at break       | ASTM D638        | 5mm/min                          | %                   | 3.4         |
| Tensile Modulus               | ASTM D638        | 5mm/min                          | kgf/cm <sup>2</sup> | 38000       |
| Tensile Strength at break     | ASTM D638        | 5mm/min                          | kgf/cm <sup>2</sup> | 770         |
| Flexural Strength             | ASTM D790        | 2.8mm/min                        | kgf/cm <sup>2</sup> | 800         |
| Flexural Modulus              | ASTM D790        | 2.8mm/min                        | kgf/cm <sup>2</sup> | 37000       |
| Izod Impact Strength(notched) | ASTM D256        | 1/4 inch at 23°C                 | kgf-cm/cm           | 12          |
| Izod Impact Strength(notched) | ASTM D256        | 1/8 inch at 23°C                 | kgf-cm/cm           | 7           |
| Rockwell Hardness             | ASTM D785        | R-Scale                          | -                   | 109         |
| <b>Thermal</b>                |                  |                                  |                     |             |
| Heat Deflection Temperature   | ASTM D648        | 18.56kgf/cm <sup>2</sup> , 6.4mm | °C                  | 97          |
| Heat Deflection Temperature   | ASTM D648        | 4.6kgf/cm <sup>2</sup> , 6.4mm   | °C                  | 102         |
| VICAT Softening Temperature   | ISO 306          | B/50                             | °C                  | 99          |
| <b>Flammability</b>           |                  |                                  |                     |             |
| Flammability                  | UL94             | V-0                              | mm                  | 1.6,2.5,3.0 |
| Flammability                  | UL94             | 5VA                              | mm                  | 2.5         |

1. The above figures are the representative values based on NP, which may vary from color to color, and can be used as a reference only for the purpose of selecting materials.
2. The above figures are basic guidelines for selecting materials; therefore, they are not regarded as the official specifications for materials involved, and cannot be used for the purpose of designing a mold.
3. The above values can be adjusted in accordance with processing conditions, and the specific change in value is allowed only within a limited range in which adjustment has no adverse or negative impact on the final product.

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\* The last update date : 2014/05/13



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