## ABS-50

Classification: General purpose
Characteristic: Medium Impact, High rigidity
Application: Electronic and Electrical parts, vacuum cleaner, washing machine cover and Refrigerator door cap \& etc

| Property | Test method <br> (ASTM) | Test condition | Unit | Typical <br> value | ABS-50 <br> Specification |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Izod impact | D-256 | 6.4 mm , notched | $\mathrm{Kj} / \mathrm{m}^{2}$ | 23 | Min19 |
| Melt flow index | D-1238 | $220^{\circ} \mathrm{c}, 10 \mathrm{~kg}$ | $\mathrm{gr} / 10 \mathrm{~min}$ | 35 | 29-39 |
| Rock well hardness | D-785 | ........ | R -scale | 109 | 95-115 |
| HDT | D-648 | 1.82 m pa | ${ }^{\circ} \mathrm{C}$ | 85 | Min82 |
| Vicat softening Temp | D-1525 | $5 \mathrm{~kg} / 50^{\circ} \mathrm{c}$ | ${ }^{\circ} \mathrm{C}$ | 95 | Min 93 |
| Tensile strength | D-638 | $23^{\circ} \mathrm{C}, 50 \mathrm{~mm} / \mathrm{min}$ | $\mathrm{Kg} / \mathrm{cm}^{2}$ | 455 | Min 420 |
| Tensile elongation | D-638 | $23^{\circ} \mathrm{C}, 50 \mathrm{~mm} / \mathrm{min}$ | \% | 20 | Min 16 |
| Flexural strength | D-790 | $23^{\circ} \mathrm{c}, 2.8 \mathrm{~mm} / \mathrm{min}$ | $\mathrm{Kg} / \mathrm{cm}^{2}$ | 650 | Min 620 |
| Flexural Modulus | D-790 | $23^{\circ} \mathrm{c}, 2.8 \mathrm{~mm} / \mathrm{min}$ | $\mathrm{Kg} / \mathrm{cm}^{2}$ | 22000 | Min17000 |
| Specific Gravity | D-792 | $23^{\circ} \mathrm{C}$ | .. | 1.04 | 1.04 |
| Molding Shrinkage | D-955 | $\ldots$ | \% | 0.4-0.7 | 0.4-0.7 |
| Flammability | U194 | 1/8inch(3.2mm) | $\ldots$ | HB | HB |

## TYPICAL ABS PROCESSING CONDITIONS

DRYING: it is recommended that GBPC ABS Resins be dried at ( $80-85^{\circ}$ ) for 3 hours.
The following molding conditions are recommended starting point for GBPC ABS Resin. A moisture level of $\leq 0.1 \%$ should be reached before injection molding the resin.

Some modifications may be required depending on the specific molding equipment and part configuration.
INJECTION MOLDIN

| Rear Temp $\left({ }^{\circ} \mathrm{c}\right)$ | Center Temp <br> $\left({ }^{\circ} \mathrm{c}\right)$ | Center Temp ( $\left.{ }^{\circ} \mathrm{c}\right)$ | Front Temp $\left({ }^{\circ} \mathrm{c}\right)$ | Nozzle Temp $\left({ }^{\circ} \mathrm{c}\right)$ | Melt Temp $\left({ }^{\circ} \mathrm{c}\right)$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $190-200$ | $200-210$ | $210-220$ | $210-220$ | $215-225$ | 230 |
| Mold Temp $\left({ }^{\circ} \mathrm{c}\right)$ | Filling Speed |  |  |  |  |
| $60-80$ | Slow-Med |  |  |  |  |

