

## Physical properties

Prtroperty	Test Methods	Conditions	Unit	<i>TH-11</i>	<i>TH-21</i>	<i>TH-23</i>
				High Flow	General Purpose	High Impact
<b>Melt Mass Flow Rate</b>	ISO 1133	200deg.C 49N	g/10min	<b>5.2</b>	<b>3.1</b>	<b>3.9</b>
		220deg.C 98N		<b>76</b>	<b>47</b>	<b>59</b>
<b>Tensile stress at yield</b>	ISO 527-1, -2	5mm/min	MPa	<b>47</b>	<b>51</b>	<b>44</b>
<b>Nominal strain at break</b>			%	<b>36</b>	<b>36</b>	<b>34</b>
<b>Flexural Modulus</b>	ISO 178	2mm/min	MPa	<b>2,250</b>	<b>2,400</b>	<b>2,100</b>
<b>Flexural Strength</b>			MPa	<b>68</b>	<b>72</b>	<b>65</b>
<b>Charpy Impact Strength</b>	ISO 179	Notched	kJ/m <sup>2</sup>	<b>9</b>	<b>11</b>	<b>12</b>
<b>Deflection temperature under load</b>	ISO 75-1, -2	1.8MPa Flatwise	deg.C	<b>64</b>	<b>65</b>	<b>63</b>
<b>Vicat Softing Temperture</b>	ISO 306	50N	deg.C	<b>84</b>	<b>86</b>	<b>84</b>
<b>Rockwell Hardness</b>	ISO 2039-2	M-scale	-	<b>34</b>	<b>39</b>	<b>29</b>
<b>Density</b>	ISO 1183	23 deg.C	kg/m <sup>3</sup>	<b>1,086</b>	<b>1,085</b>	<b>1,082</b>
<b>Light Transmission</b>	ISO 13468-1	2mmt	%	<b>91</b>	<b>91</b>	<b>91</b>
<b>Haze</b>	ISO 14782	2mmt	%	<b>2.6</b>	<b>2.4</b>	<b>2.7</b>
<b>Molding Shrinkage</b>	DENKA Method	2mmt	%	<b>0.4</b>	<b>0.4</b>	<b>0.4</b>
<b>Flammability</b>	UL94 (UL File No.E49895)			<b>HB</b>	<b>HB</b>	<b>HB</b>

\* The above values are typical and not guaranteed.

## Injection Molding Condision

	Unit	TH-11	TH-21	TH-23
Pre-drying	Temp. [deg.C]	70 ~ 80		
	Time [hr]	2 ~ 3		
Cylinder Temperature	[deg.C]	180 ~ 220	200 ~ 240	210 ~ 240
Nozzle Temperature	[deg.C]	210 ~ 230	220 ~ 240	230 ~ 240
Mold Temperature	[deg.C]	40 ~ 70		