

## KIMIDUR<sup>®</sup> PBT(820GN)

**MATERIAL NAME:** PBT

**COLOR:** NATURAL

**CODE:** PBT820GN

**MATERIAL DESCRIPTION:** Kimiadur<sup>®</sup> PBT820GN is a 20% glass fiber reinforced, prime, natural Polybutylene terephthalate resin for injection molding.

No.	PROPERTIES		METHOD	UNIT	VALUE
<b>PHYSICAL PROPERTIES</b>					
1	ASH CONTENT		ISO 3451	%	20±1.5
2	RELATIVE DENSITY		ISO 1183	g/cm <sup>3</sup>	1.51
3	VISCOSITY NUMBER		ISO 307	Cm <sup>3</sup> /gr	-
4	MOISTURE CONTENT		ISO 62	%	0.21
<b>MECHANICAL PROPERTIES</b>					
5	TENSIL STRENGTH AT BREAK (5mm/min)		ASTM/D638	MPa	115
6	ELONGATION AT BREAK (5mm/min)		ASTM/D638	%	9.4
7	TENSIL MODULUS (5mm/min)		ASTM/D638	MPa	8300
8	NOTCHED IMPACT STRENGTH-IZOD		ISO 180	Kj/m <sup>2</sup>	7.5
9	UN NOTCHED IMPACT STRENGTH-IZOD		ISO 180	Kj/m <sup>2</sup>	50.0
<b>THERMAL PROPERTIES</b>					
10	HARDNESS		ISO 868	Shore D	74
11	MFI		ASTM/D1238	g/10min	-
12	VICAT(50° C/h)	10N	ASTM/D1238	° C	235
		50N			220
<b>FLAMMABILITY</b>					
13	HDT (120° C/h)	264psi	ASTM/D648	° C	198
		66psi			203
14	Flammability	Class	UL94	-	-
<b>INJECTION PROCESS PARAMETERS</b>					
<i>Loading</i>		<i>Injection</i>		<i>Degassing</i>	
<i>Speed</i>	<i>Pressure (Bar)</i>	<i>Speed</i>	<i>Pressure (Bar)</i>	<i>Temperature</i>	<i>Time</i>
60	80	60	80	80 °C	0.5h
<i>Mold Releasing</i>		<i>Zone</i>			
Good		5	4	3	2
		- °C	220 °C	225 °C	230 °C