



# TECHNICAL DATA SHEET

**Product Name** : TPA-5050N01  
**Product Description** : ABS / TPU Blend

Physical Properties		Test Method	Unit	Value
Melt Flow Index (MFI)	200 °C / 10 Kg.	ASTM D 1238	gr/10 min.	14.2
Ash Content		ISO 3451	%	
Colour Value		-	DE	
Gloss / 60 °		ASTM D 523	-	5
Thermal Properties		Test Method	Unit	De er
Vicat Softening Temp. 50 N-50 °C/h		ASTM D 1525	°C	65.5
Heat Deflection Temp. (HDT) 120 °C / h-1.8 Mpa		ASTM D 648	°C	
Melting Point		-	°C	170
Mechanical Properties		Test Method	Unit	De er
Tensile Elongation At Yield / 5mm/min.		ASTM D 638	%	20
Tensile Strength At Yield		ASTM D 638	MPa	19.3
Tensile Strength At Break		ASTM D 638 M	MPa	18.7
Tensile Elongation At Break		ASTM D 638 M	%	>900
Hardness (SHORE D)		ASTM D 2240	3 Second	60
Hardness (SHORE A)		ASTM D 2240	3 Second	94
Izod Impact Strength, Notched		ASTM D 256	KJ /m <sup>2</sup>	70
Charpy Impact Strength, Notched		ASTM D 256	KJ /m <sup>2</sup>	
Abrasion Resistance		ISO 4649	mm <sup>3</sup>	
Flammability		Test Method	Unit	De er
Flammability Classification	3,2 mm thickness	UL 94	Class	HB
Glow Wire Flammability Index	... mm thickness	IEC 60695-2-12	°C	
Glow Wire Ignition Test	... mm thickness	IEC 60695-2-13	°C	
Other Properties		Test Method	Unit	De er
Specific Gravity		ASTM D 792	gr / cm <sup>3</sup>	1.12
Moisture Content		ISO 15512	%	0.10
Molding Shrinkage (+ 23 °C)		ISO 2577	%	1.41

All mentioned information in this technical data sheet present current knowledge and experience of AKAY PLASTIK. The data may not be valid when this product is used in combination with other materials such as pigments or additives which may cause significant variations in data values. Please note that the data are given for dry as molded values as related to the mentioned material only. Naturally, these data do not guarantee certain values since may vary on customer's processing conditions, so they are provided for reference purposes only and should not be used alone to create specification limits and design basis. It is strongly recommended for customers to test the product under their own processing conditions and test facilities to determine the suitability for the required application and use.

[www.akayplastik.com](http://www.akayplastik.com)  
AKAY PLASTIK SAN.VE TIC.AS.  
Gebze Organize Sanayi Bolgesi 300.Sok. No:302 41430  
Gebze – KOCAELI / TURKIYE  
Tel: +90 262 7510143 Fax: +90 262 7510143

