



Green Initiative

July 2021

Ningbo Signatronic Technologies Ltd.

Pro-Green AM Labels (“-G” products) Patent and Trademark pending



“Green Initiative” is aimed to offer pro-green sustainable EAS products particularly AM labels (all item codes end with “-G”, e.g. NST3T-G, NTL-G). “-G” AM Label’s plastic house is mainly made of used PS, such as used TV set shells or other waste electronic plastics. The exploitation of recycling technology modification waste PS not only reduces the pollution of such wasted plastics on the environment, but also makes wasted PS re-usable to reduce total energy consumption. It offers a product for retailers worldwide to carry out pro-green tasks while using multi-billions pieces of AM labels annually.



Here is the introduction on our “-G” labels via the recycling process:

1. Collect and store PS wastes



2. Process PS wastes by separating, crushing and washing.



3. PS wastes flakes after being washed



4. Modification (Compounding) of the PS wastes



5. Modified recycled PS pellets made



6. Modified recycled PS film made from the pellets



7. Pro-Green AM Labels with slight yellowy color made (vs existing non-green “white” labels)





Typical Modified Recycled PS Data Sheet

(Subject to change without notice due to product upgrade)

Properties	Test Standard	Test Condition	S.I. Unit	Typical Value
Mechanical				
Tensile Strength	GB/T 1040.2	50mm/min	MPa	22
Tensile Strain at Break	GB/T 1040.2	50mm/min	%	25
Flexural Strength	GB/T 9341	2mm/min	MPa	37
Flexural Modulus	GB/T 9341	2mm/min	MPa	1900
Izod Notched Impact Strength	GB/T 1843	25 C	kJ/m ²	11
Thermal				
Temperature of Deflection Under Load	GB/T 1634.2	1.8MPa	°C	68
Others				
Density	GB/T 1033.1		g/cm ³	1.03-1.08
Water Absorption	GB/T 1034		%	0.2
Melt Mass-flow Rate(MFR)	GB/T 3682	200 C ,5KG	g/10min	3-7
Molding Shrinkage	GB/T 15585		%	0.5-0.7
Flammability	UL 94		/	HB

Typical Processing Conditions

		Optimum	Range
Melt Temp.		200 C	±20 C
Barrel Zone Temp.	Rear	200 C	±20 C
	Center	200 C	±20 C
	Front	200 C	±20 C
Mold Temp.		70	
Processing Temp. Upper Limit		240	
Injection Speed		Middle speed	
Back Pressure			
Pre-dry Requirements		70	

The product meets RoHS and REACH requirements