

PRIMEX PLASTICS CORPORATION

A subsidiary of ICC Industries Inc.



Prime ABS ST80

Prime ABS ST80	Very High	High	Avg.
Impact Strength	*		
Low Temperature Impact Strength			*
Tensile Strength			*
Flexural Modulus			*
Heat Deflection Temperature		*	

Prime ABS ST80 is an alloy of weatherable thermoplastic elastomers co-extruded over a rigid ABS substrate. It was designed to provide a low gloss look and soft feel, which boasts excellent durability, chemical resistance and UV stability as well as improved sound dampening.



Property	Test Method	Value	Unit
Specific Gravity	D-792	1.042	g/cc
Melt Flow	D-1238	3.03	g/10min
Gloss, 60° Angle	D-523	2.5	%
Elongation @ Yield	D-638	7	%
Ultimate Tensile	D-638	3590	psi
Ultimate Elongation	D-638	10.03	%
Hardness, initial	D-2240	53.2	Shore D
Flexural Modulus 0.05 in/min, 2" span	D-790	118,000	psi
Notched Izod @ 73°F	D-256	9.3	ft-lb/in
Surface Resistivity		10 ¹⁴	Ohms/ square
Hardness, Initial	D-2240	53	Shore D
HDT @ 66 psi, Un-annealed	D-648	200	°F
HDT @ 264 psi, Un-annealed	D-648	178	°F
Vicat Softening Point	D-1525	221	°F
CLTE	D-696	5.3 ¹⁰⁻⁵	in/in°F

Property values above are based on .125" extruded sheet"

Applications:

Prime ABS ST80 is particularly suited for use in exterior applications or those interior parts that will be exposed to direct UV light such as dashboards, panels and trim. This includes marine, recreational, automotive, heavy truck, agricultural and construction equipment.

Finishing:

Prime ABS ST80 can be screwed, drilled, routed, punched and die-cut with conventional tooling. Parts made with Prime ABS ST80 may be joined with machine screws, bolts, nuts, rivets, and spring steel fasteners. Thread-cutting or thread-forming screws are an economical means of securing separate joints. Formed parts may be joined with Methylene Chloride if maximum impact strength is not required. Press and snap techniques and sonic welding may also be used for the bonding of Prime ABS ST80.

Colors, Textures and Capabilities:

Prime ABS ST80 can be color matched to meet your specific requirements. Textures include Calf Grain, HC, Seville, Levant I, and FL/HC.

Processing:

Prime ABS ST80 can be thermoformed on conventional equipment employing techniques typical for thermoforming ABS. Male or Female tools may be used. Prime ABS ST80 should be heated only from the substrate side. As long as the substrate reaches a temperature suitable for thermoforming, the soft touch cap layer will also be hot enough to thermoform. The soft touch cap layer should not be heated to a temperature above 315°F. The best appearance and performance of the soft touch cap layer has been obtained when the sheet is thermoformed with the temperature of the cap layer at 280°F. As a general rule, heating rates of 0.5-0.75 sec/mil are the maximum recommended for thermoforming ABS.