

FARAPRENE F301-55A

PRIMEX COLOR, COMPOUNDING & ADDITIVES



Faraprene F301-55A is an FDA compliant general purpose TPE which is used mainly in injection molding applications but can also be extruded in applications which do not require high levels of melt strength. This material shows good adhesion to PP and TPO's, and can be made pre-colored, natural, and black.

MECHANICAL PROPERTIES

Mechanical

	Value	Unit	Method
Tensile Stress at break ^{1, 2}	775	PSI	ASTM D412
100% Tensile modulus ¹	150	PSI	ASTM D412
Elongation at break ^{1, 2}	1000	%	ASTM D412
Tear Strength ¹	130	lb/in	ASTM D624

¹ tested in cross flow direction, ² samples did not break

Physical / Rheological

	Value	Unit	Method
Specific Gravity	1.17	-	ASTM D792
Melt Flow Rate, 230°C, 2.16 kg load	2.0	g/10 min	ASTM D1238
Viscosity @ 200°C & 200 s ⁻¹	160	Pa s	Internal
Hardness, 10 sec. Shore A	55	-	ASTM D2240

PROCESSING DATA

Processing Parameter

Injection Molding

	Value	Unit
Melt Temperature	350-420	°F
Rear- Zone 1 Temperature	335-360	°F
Middle-Zone 2 Temperature	340-390	°F
Front- Zone 3 Temperature	350-420	°F
Nozzle Temperature	350-420	°F
Mold Temperature	70-100	°F
Backpressure	15-50	PSI
Screw Speed	50-130	RPM
Shot to Cylinder Size	50-80	%

The process conditions listed are suggested starting points and some deviations may be needed depending on the process / part design.

THESE VALUES ARE NOT INTENDED FOR SPECIFICATION PURPOSES

- (1) Typical values only. Variations within normal tolerances are possible.
- (2) Only typical data for selection purposes. Not to be used for part or tool design.
- (3) This rating is not intended to reflect hazards presented by this or any other material under actual fire conditions.

Extrusion

	Value	Unit
Melt Temperature	350-420	°F
Rear Zone 1 Temperature	335-360	°F
Middle Zone 2 Temperature	340-390	°F
Front Zone 3 Temperature	350-410	°F
Adapter	350-420	°F
Head	350-420	°F
Die	350-420	°F
Screw Speed	30-60	RPM



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