



Grades: ViviOn™ 0510HFE

ViviOn™ Cyclic Block Copolymers (CBCs) is a new class of polymers made by fully hydrogenating block copolymers of styrene and conjugated diene.

The grade ViviOn™ 0510HFE contains the unique features below:

- Can be processed with injection molding and extrusion.
- ViviOn™ 0510HFE is a higher flow variant of ViviOn™ 0510EUT, designed for easier processing.
- ViviOn™ 0510HFE is the EUT variant of ViviOn™ 0510HF, specially designed for applications that require higher UV transmittance in the UV-C range (200 – 280nm).

USI Corporation



Properties	Test Method (ASTM)	Units	ViviOn™0510HFE
General Properties			
Density	D-792	g/cm ³	0.94
Water Uptake	D-570	%	< 0.01
Melt Flow Rate (260 °C/ 2.16kg)	D-1238	cm ³ /10min	13
Optical Properties			
Refractive Index	-	-	1.51
Light Transmission (380nm – 760nm)	D-1003	%	92
Haze	D-1003	%	< 0.5
Thermal Properties			
Vicat Softening Temp. (1kg, 50 °C/ hr)	D1525	°C	114
Heat Distortion Temp. (0.455 MPa, 2°C/min)	D648	°C	88
Glass Transition Temperature	DSC	°C	120
Mechanical Properties			
Flexural Strength	D-790	MPa	66
Flexural Modulus	D-790	GPa	1.8
Tensile Strength (B.P.)	D-638	MPa	35
Elongation (B.P.)	D-638	%	15
Impact Strength (Izod Notched)	D-256	J/m	48
Impact Strength (Charpy Notched)	D-6110	kJ/m ²	5.0

