SOLVAY ENGINEERED POLYMERS technical data

NEXPRENE® 9080ACM

DESCRIPTION:

NEXPRENE® 9080A CM Thermoplastic Elastomer is a fully crosslinked, EPDM/PP compound designed for corner molding and over molding applications. It is easily injection molded and is fully bondable to TPV and EPDM. High heat stability of these products allows for processing temperatures as high as 500 °F that promotes excellent bonding. Other attributes are easy to color (due to extreme white neutral color), weatherable, and may be recycled with other polyolefins.

APPLICATIONS:

Suitable for applications requiring flexibility in the following markets: automotive weatherseal corner molding, appliance, business machines, construction, consumer products, electrical & electronics and fluid delivery.

PROPERTY	TYPICAL VALUE	UNITS	METHOD
Shore Hardness			
23°C, 15 sec injection molded	80	Shore A	ISO 868
Shore Hardness			
23°C, 5 sec injection molded	81	Shore A	ISO 868
Specific Gravity			
23°C	0.96	g/cc	D-792
Tensile Strength			
23°C	9	MPa	ISO 37 Type 1
Ultimate Elongation			
23°C, 500 mm/min	320	%	ISO 37 Type 1
100% Modulus			
23°C, 500 mm/min	6	MPa	ISO 37 Type 1
Tear Strength			
23°C	45	kN/m	ISO 34-1 (B)
Compression Set			
23°C, 24 hrs	23	%	ISO 815, Large
100° C, 24 hrs	-	%	ISO 815, Large
125°C, 72 hrs	60	%	ISO 815, Large
Fogging (Photometric Method)			
95°C, 6hrs, 38°C plate	84	%	SAE J1756 - 1 hr/23° cond.
95°C, 6hrs, 38°C plate	88	%	SAE J1756 - 16 hr/23° cond.
Weathering (Black Sample)			
Color change (Interior)	< 1	Delta E	SAE J1885 (1200kJ/m²)
Color change (Exterior)	2	Delta E	SAE J1960 (2400kJ/m²)
Solar Aging for 12 months	-	Delta E	SAE J1976
Brittle Point	< -55	°C	D-746
Oil Volume Swell (125°C/72hr)	70	% (by Vol.)	ISO 1817 (IRM 903 Oil)

Samples die cut from injection molded 2.0mm plaques (end gated, cut perpendicular to flow)
1/03E

Solvay
Engineered Polymers GmbH
Maaßstraße 28
D-69123 Heidelberg
Phone: +49 (0) 6221 828160
Fax: +49 (0) 6221 8281610