

SABIC® 4935

SABIC® PP 4935 is a random copolymer with a very high molecular weight. This grade has a special stabilization package. The stabilization and particular molecular structure make it suited for use in extremely demanding applications like coolant expansion vessels in cars. The grade can be processed by injection molding. The material has a medium impact, is semi-transparent and has a good stress-whitening (low blushing) characteristic. IMDS ID: 80775790
Information provided by SABIC

Physical Properties	Metric	English	Comments
Density	0.905 g/cc	0.0327 lb/in ³	ASTM D1505

Linear Mold Shrinkage

0.019 cm/cm

0.019 in/in

All measurements on injection molded samples.; SABIC method

Melt Flow

0.30 g/10 min
@Load 2.16 kg,
Temperature 230 °C

0.30 g/10 min
@Load 4.76 lb,
Temperature 446 °F

ISO 1133

Mechanical Properties	Metric	English	Comments
Hardness, Shore D	66	66	ISO 868

Tensile Strength, Yield

35.0 MPa

5080 psi

ISO 527-2 1A

Elongation at Yield

12 %

12 %

Speed of testing: 50 mm/min; ISO 527-2 1A

Tensile Modulus

1.30 GPa

189 ksi

Speed of testing: 1 mm/min; ISO 527-2 1A

Izod Impact, Notched (ISO)

12.0 kJ/m²

5.71 ft-lb/in²

ISO 180/1A

1.50 kJ/m²
@Temperature -20.0 °C

0.714 ft-lb/in²
@Temperature -4.00 °F

ISO 180/1A

2.50 kJ/m²
@Temperature 0.000 °C

1.19 ft-lb/in²
@Temperature 32.0 °F

ISO 180/1A

Charpy Impact, Notched

0.250 J/cm²

1.19 ft-lb/in²

ISO 179/1eA

0.600 J/cm²

2.86 ft-lb/in²

ISO 179/1eA

Thermal Properties	Metric	English	Comments
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Vicat Softening Point

86.0 °C

187 °F

at 50 N (VST/B);
Temperature rate:
120°C/h; ISO 306

145 °C

293 °F

at 10 N (VST/A);
Temperature rate:
120°C/h; ISO 306