

## 12"-60" (300-1500 mm) HP STORM RESIN PROPERTIES DETAIL

This document provides the material properties for the polypropylene resin used for production of 12"-60" (300-1500 mm) ADS HP Storm dual wall (Type S) and 30"-60" (750-1500 mm) ADS HP Storm triple wall (Type D) pipe, both meeting the requirements of AASHTO M330 (perforated and non-perforated).

Property	Test Method	Unit	Value
Density	ASTM D1505	g/cm <sup>3</sup>	0.900-0.950
Melt Flow Rate	ASTM D1238	g/10min	0.15-1.5
Flexural Modulus	ASTM D790	psi (MPa)	175,000 to 275,000 (1200 to 1900)
Tensile Strength	ASTM D638	psi (MPa)	3,500 to 4,500 (21 to 31)
Elongation at Yield	ASTM D638	%	5 to 25
IZOD Impact Strength	ASTM D256	ft-lb/in <sup>2</sup> (kJ/m <sup>2</sup> )	23.8 (50) to No Break
Oxidative-Induction Time	ASTM D3895	min	25 to 200
75-year Modulus of Elasticity	ASTM D6992	psi (MPa)	27,000 (186) or greater
75-year Tensile Strength	ASTM D6992	psi (MPa)	1,000 (7) or greater