

3"-24" (75-600 mm) HDPE SINGLEWALL PER ASTM RESIN PROPERTIES DETAIL

This document provides the cell classification and respective material properties in accordance with ASTM D3350 for the high-density polyethylene resin used for productions of 3"-24" (75-600 mm) ADS Single Wall Heavy Duty pipe meeting the requirements of ASTM F667.

Cell Classification per ASTM D3350: **323410C**

Cell Class Number	Property	Test Method	Units	Value
3	Density	ASTM D1505	g/cm ³	>0.940-0.947
2	Melt Index	ASTM D1238	g/10min	1.0-0.4
3	Flexural Modulus	ASTM D790	psi (MPa)	40,000 to <80,000 (276 to <552)
4	Tensile Strength	ASTM D638	psi (MPa)	3,000 to <3,500 (21 to <24)
1	Slow Crack Growth Resistance, ESCR	ASTM D1693	Test condition, 100% Igepal Test duration, hours Failure, max	B 48 50%
0	Hydrostatic Design Basis	ASTM D2837	psi (MPa)	Not pressure rated
C	Color and UV Stabilizer	ASTM D3350	-	Black; Minimum 2% Maximum* 4%