



June 4, 2015

This document provides the cell classification and respective material properties in accordance with ASTM D3350-14 for the high density polyethylene resin used for production of 4-10" ADS N-12® dual wall pipe meeting the requirements of AASHTO M252, Type S or SP and ADS Single Wall Highway pipe meeting the requirements of AASHTO M252, Type C or CP.

Cell Classification per ASTM D3350-14: **424420C**

Cell Class Number	Property	ASTM Test Method	Unit	Value
4	Density	D1505	g/cm <sup>3</sup>	>0.947 – 0.955
2	Melt Index	D1238	g/10min	1.0 – 0.4
4	Flexural Modulus	D790	psi (MPa)	80,000 to <110,000 (552 to <758)
4	Tensile Strength	D638	psi (MPa)	3,000 to <3,500 (21 to <24)
2	Slow Crack Growth Resistance, ESCR	D1693	Test condition, 100% Igepal Test duration, hours Failure, max	B 24 50%
0	Hydrostatic Design Basis	D2837	psi (MPa)	Not pressure rated
C	Color and UV Stabilizer	D3350	--	Black; Minimum 2%, Maximum* ≤4%

\*Not specified in ASTM D3350; requirement per AASHTO M252