



CERANOVUS[®] A PRODUCT COMPARISON

Comparative Properties of **Ceranovus[®] A120 Polyethylene** and **Ceranovus[®] A155 Polypropylene** waxes with a typical Fischer Tropsch Wax

Property	Ceranovus A120 Wax	Ceranovus A155 Wax	Fisher Tropsch Wax
Viscosity @140°C (cPs)	700	75	10
Dropping Point (°C)	122	155	112
Penetration (dmm)	2	2	1
Density (g/cm ³)	0.93	0.91	0.90
DSC Data			
Melt Point (°C)	120	153	>75
Enthalpy (J/g)	150	80	205
Crystallization Temperature (°C)	106	106	97
Crystallinity (%)*	51	38	70
NMR Data			
Level of Unsaturation	-0.25-0.75%	<0.25%	0%
GPC Data			
Polydispersity Index	3.602	2.321	1.212
Mw(Da)	7156	4028	880
Mn	1987	1735	741

**Assumes 292 J/g = 100% crystalline PE wax, 207 J/g = 100% crystalline PP wax and 292 J/g = 100% crystalline Fisher Tropsch wax*

The table clearly shows the differences in the physical properties and structures of the Ceranovus A series polyethylene and polypropylene waxes compared with FT waxes.

Ceranovus A120 and A155 waxes have higher molecular weights combined with greater levels of short chain branching and strategic amounts of olefin content which improve polarity. These properties create an asymmetrical or amorphous polymer, demonstrated by the higher polydispersity index, that remains bound within the asphalt formulation matrix rather than blooming or migrating to the surface.

Only GreenMantra's unique technology and innovative production process has the ability to generate this specific amorphous character while also dialing-in the desired melting point and viscosity for polyethylene and polypropylene waxes.



GREENMANTRA[®]
TECHNOLOGIES

TYPICAL PROPERTIES OF CERANOVUS A SERIES WAXES

	DENSITY (g/cm ³) ASTM D1298	DROP POINT (°C) ASTM D3954	NEEDLE PENETRATION @ 25°C in dmm (0.1 MM) ASTM D1321	VISCOSITY cps @ 140°C BROOKFIELD
Ceranovus PE Wax				
A115	0.92	116	2	225
A120	0.93	122	2	700
A125	0.94	126	1	2025
	DENSITY (g/cm ³) ASTM D1298	DROP POINT (°C) ASTM D3954	NEEDLE PENETRATION @ 25°C in dmm (0.1 MM) ASTM D1321	VISCOSITY cps @ 190°C BROOKFIELD
Ceranovus PP Wax				
A155	0.90	155	2	75

GreenMantra Technologies remains committed to producing and delivering products that exceed our customers expectations.



MADE WITH 100% RECYCLED
POST-CONSUMER MATERIAL

Our products are available in pastilles. Packaging is available in Kraft bags and superpacks.

Please contact us for information on pricing, specifications and samples at info@greenmantra.com.