

High Voltage Cable Insulation Grade

DENSITY

0.922

Hanwha Wire & Cable Compound CLNA-8141SC is a low density, crosslinkable polyethylene compound designed for high voltage(up to 154kV) power cable insulation requiring a high degree of cleanness. It has an extremely low level of contamination and proper balance of non-staining antioxidant and peroxide to ensure thermal stability and optimum cure levels.

■ **Outstanding Properties**

Excellent Scorch Property
Superior Electrical Property
Good Heat Resistance
Excellent Crosslinking Characteristics

■ **Processing Conditions**

Extrusion Temperature : 115~130℃
Cure Temperature : 300~390℃
Line Speed : 2~3 m/min

■ **Specifications**

Hanwha CLNA-8141SC meets the applicable requirements as below :
ICEA S-66-524, S-94-649, S-93-639
AEIC CS7, CS8
IEC 60502, 60840

HD 620 S1, 632 S1
BS 6622
VDE 0273

■ **Properties**

Physical Properties	Unit	Test Method	Value
Density	g/cm ³	ASTM D1505	0.922
Tensile Strength	kg/cm ²	ASTM D638	200
Elongation	%	ASTM D638	550
Oven Aging, 7 days @ 136℃		ASTM D638	
Tensile Strength Retention	%		>95
Elongation Retention	%		>95
Hardness(Shore D, 1sec)	-	ASTM D2240	50
Low Temperature Brittleness	℃	ASTM D746	<-76
Environmental Stress Crack Failures after 21 days in		ASTM D1693	
10% Igepal C ₀ -630	EA		0
100% Igepal C ₀ -630	EA		0
Degree of Crosslinking	%	ASTM D2765A	82
Hot/Set	%	IEC 811-2-1	75
Electrical Properties	Unit	Test Method	Value
Dielectric Constant @ 1 MHz	-	ASTM D150	2.28
Dissipation Factor @ 1 MHz	-	ASTM D150	0.0004
Dielectric Strength	kV/mm	ASTM D149	22
DC Volume Resistivity	ohm cm	ASTM D257	>1 × 10 ¹⁶

* Values are typical : not to be construed for specification.

<http://hcc.hanwha.co.kr>