



Polymers

CONDUCTIVE AND EXTRA CONDUCTIVE CARBON BLACKS FOR POLYMERS

ENSACO[®] Carbon Black

- High electrical conductivity
- High purity
- Easy dispersion
- Easy compounding and processing with high extrusion throughput
- Low moisture absorption
- Smooth surface finish
- Good balance of mechanical, flow, electrical and dynamic properties
- Improved stability to shear

FINAL APPLICATIONS INCLUDE:

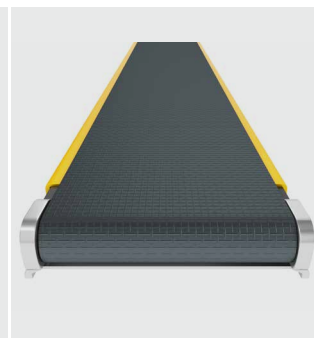
Final applications include: Electronic packaging, packaging for flammable products, antistatic flooring, fuel hoses and tanks, industrial pipes, ATEX and ESD, EMI shielding, power cables and accessories (MV and HV semicon compounds for conductor and insulator shielding, easy strippable insulator shielding, cable terminations and junctions), conveyor and transmission belts, cylinder covering, rollers, safety systems and switches, heating systems, electrostatic painting, anti-vibration systems, microwave heating of thick rubber parts, conductive silicones, FKM.



Courtesy of Premix OY

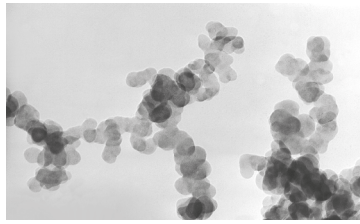


Courtesy of General Cable



www.imerys-graphite-and-carbon.com

ENSACO® CONDUCTIVE CARBON BLACK PORTFOLIO



TEM of ENSACO® 250G

ENSACO® carbon blacks are a special family of electrically conductive carbon blacks, produced through a proprietary method, that delivers extremely pure products with many advantages over conventional alternatives:

ENSACO® TYPICAL VALUES

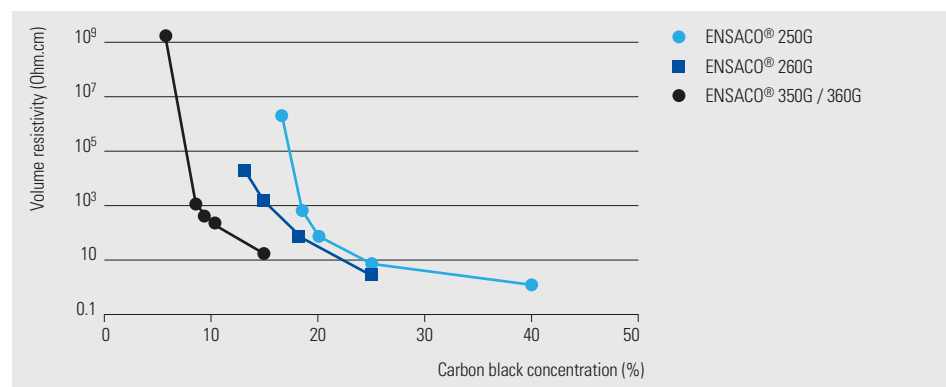
PROPERTY TEST METHOD	UNIT	CONDUCTIVE		EXTRA CONDUCTIVE	
		ENSACO® 250G	ENSACO® 260G	ENSACO® 350G	ENSACO® 360G
Form		Granules(*)	Granules	Granules	Granules
BET nitrogen surface area ASTM D3037	m ² /g	65	70	770	780
OAN absorption ASTM D2414 (1)	ml/100g	190	190	320	320
Pour density ASTM D1513	kg/m ³	170	170	135	135
Ash content ASTM D1506	%	0.01	0.01	0.03	0.03
Sulphur content ASTM D1619	%	0.02	0.02	0.02	0.02
Benzo[a]pyrene	ppb	<20	<20	<20	<20

ENSACO® TYPICAL EFFECTS ON POLYMER COMPOUNDS

PROPERTY	CONDUCTIVE		EXTRA CONDUCTIVE	
	ENSACO® 250G	ENSACO® 260G	ENSACO® 350G	ENSACO® 360G
Form	Granules(*)	Granules	Granules	Granules
Conductivity	+++	+++	++++	++++
Dispersibility	+++	+++	++	++
Purity	+++	+++	++	++
Surface smoothness	+++	+++	++	++
Water absorption	very low	very low	high	high
Resistance to Shear	+++	++++	+++	+++

(1) Spring: 0.9 lbs/inch; 10 g of carbon black

(*) Ensaco® 250 is also available in powder form.



Electrical Conductivity in HDPE