



# LOW PAH CARBON BLACKS

## ENSACO<sup>®</sup> Carbon Black

ENSACO<sup>®</sup>  
CARBON BLACKS  
MEET  
THE SEVEREST  
PURITY  
REQUIREMENTS

ENSACO<sup>®</sup> carbon blacks meet the severest purity requirements for low PAH (polycyclic aromatic hydrocarbons) and BAP (benzo[a]pyrene). Complying with the most stringent legislation, the primary purpose of these extremely clean carbon blacks is to give electrical conductivity to polymers at low to very low loadings. ENSACO<sup>®</sup> carbon blacks are also employed when high purity, an excellent level of dispersion or low moisture levels are specifically required.

### KEY FEATURES

The Imerys Graphite & Carbon proprietary manufacturing process enables the controlled production of extremely clean, easily dispersible, low surface area conductive carbon blacks as well as extra-conductive carbon blacks with the following key features:

PROPERTIES	NORMS	UNITS	VERY CLEAN EASY-DISPERSIBLE CONDUCTIVE CARBON BLACK	VERY CLEAN EXTRA- CONDUCTIVE CARBON BLACK
			ENSACO <sup>®</sup> 250G	ENSACO <sup>®</sup> 350G
OAN Structure	ASTM D2414	ml/100g	190	380
BET surface area	ASTM D3037	m <sup>2</sup> /g	65	770
Ash content	ASTM D1506	%	0.01	0.01
Grit 45 µm / 325 mesh	ASTM D1514	ppm	2	5
Total Sulphur content	ASTM D1619	%	0.02	0.02
Moisture content	ASTM D1509	%	0.1	0.5
Volatiles	Int. method 02	%	0.1	0.3
Pour density	ASTM D1513	kg/m <sup>3</sup>	180	135



[www.imerys-graphite-and-carbon.com](http://www.imerys-graphite-and-carbon.com)

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Thanks to its unique combination of high structure and low surface area, ENSACO® 250G exhibits outstanding dispersibility in polymers leading to easy-extrusion and a smooth surface finish, whilst the extra-conductive carbon black ENSACO® 360G will boost the electrical conductivity at a low carbon black loading. The low surface area as well as the very low surface oxygen content of ENSACO® 250G also ensure inertness to peroxide and moisture.

## HIGH PURITY AND PRODUCT CONSISTENCY

The entire ENSACO® carbon blacks range exhibits a low PAH content. ENSACO® carbon blacks have undergone specific testing and the values measured for PAH and BAP on the standard grades are presented in the below table:

UNIT: ppm	ENSACO® 250G	ENSACO® 350G
Naphtalene	0,388	22,682
Acenaphtylene	0,010	0,569
Acenaphthene	0,006	0,509
Fluorene	0,015	0,624
Phenanthrene	0,039	2,471
Anthracene	0,006	0,490
Fluoranthene	0,010	0,594
Pyrene	0,017	0,271
(*) Benzo[a]anthracene	0,002	0,055
(*) Chrysene	0,004	0,092
(*) Benzo[b]fluoranthene	<0,001	0,008
(*) Benzo[j]fluoranthene	<0,001	0,004
(*) Benzo[k]fluoranthene	<0,001	0,005
(*) Benzo[a]pyrene	<0,001	0,003
(*) Benzo[e]pyrene	0,001	0,003
Indeno[1,2,3-cd]pyrene	<0,001	<0,001
(*) Dibenzo[a,h]anthracene	<0,001	<0,001
Benzo[ghi]perylene	<0,001	<0,001

PAH= polycyclic aromatic hydrocarbons; BAP= benzo[a]pyrene.

The results were conducted by an external accredited laboratory, and the determination of the PAH profile was carried out with a toluene extract applying a stable isotope dilution methodology with GC-MS (SIM) analysis.

(\*) The listing includes the 8 PAHs listed by the COMMISSION REGULATION (EU) No 1272/2013

Upon request, we are happy to provide a certificate with the PAH values for a specific production lot. The high purity and high product consistency of the entire ENSACO® carbon blacks range enable Imerys Graphite & Carbon to accept specifications on maximum total PAH and BAP content.