

Ketjenblack® EC-300J

Chemical description	Electroconductive carbon black, pellets
	CAS No. : 1333-86-4
	EINECS/ELINCS No. : 215-609-9
	TSCA status : listed on inventory
Specifications	Appearance : Black free-flowing pellets
	Pore volume (DBP) : 310-345 ml/100 g
	Iodine adsorption : 740-840 mg/g
	Moisture : 0.5% max.
	Volatiles : 1.0% max.
	Ash : 0.05% max.
	Fines <125 micron : 7% max.
	Grit content : 30 mg/kg max.
	pH : 9.0-10.5
	Apparent bulk density : 125-145 kg/m ³
Storage	AkzoNobel recommends to store <i>Ketjenblack</i> EC-300J in a dry well-ventilated place away from direct sunlight. The packaging can be damaged if exposed to direct sunlight for more than 30 minutes.
	When stored under the recommended storage conditions, <i>Ketjenblack</i> EC-300J will remain within the AkzoNobel specifications for a period of at least 12 months after delivery.
Packaging and transport	The standard packaging is 10 kg net in a vented PE bag. The vent consists of a small plastic valve which contains HDPE, NBR and cellulosic parts, which are not readily dispersed during compounding. Due to this, we strongly advice not to put the <i>Ketjenblack</i> EC-300J including the bag into the mixing system. A full pallet carries 400 kg net.
	Both packaging and transport meet the international regulations. For the availability of other packed quantities contact your AkzoNobel representative.
	<i>Ketjenblack</i> EC-300J is classified as a non-hazardous good according to national and international transport regulations.
Safety and handling	Please refer to the Material Safety Data Sheet (MSDS) for detailed information on the safe storage, use and handling of <i>Ketjenblack</i> EC-300J. This information should be thoroughly reviewed prior to acceptance of this product. The MSDS is available at www.akzonobel.com/polymer .

Applications

Ketjenblack EC-300J is a very pure carbon black extremely suitable for antistatic and electroconductive applications. Due to its unique morphology and the very high surface area of approx. 800 m²/g (BET), only one third the amount of *Ketjenblack* EC-300J is needed compared to conventional electroconductive blacks in order to achieve the same conductivity. The lower loading of *Ketjenblack* EC-300J allows easier processing for those polymers sensitive to filler addition, thus minimizing loss in mechanical and rheological properties.

Ketjenblack EC-300J when thoroughly dispersed with the polymer significantly increases the conductivity of the resulting compound.

Ketjenblack EC-300J can be used in all types of polymers, thermoset, thermoplastic as well as elastomers. Due to its unique morphology and structure with relative low amounts of *Ketjenblack* EC-300J excellent conductive material can be made. The low grit content results in very smooth surfaces during extrusion. The loading needed to obtain a certain conductivity can vary significantly per type of polymer. More detailed information is provided in our special *Ketjenblack* EC Technical Bulletin.

Ketjenblack EC-300J has a very low ash content, which makes it the preferred material for semicon applications in cable shielding. *Ketjenblack* EC-300J can also be used to produce conductive coatings and primers. Also here already at very low loading levels optimal electroconductive performance is obtained minimizing loss in mechanical and rheological properties.

Some other applications are batteries, packaging for IC parts, tubing, flooring, carpet backing, automotive parts, cell phones and many more. For even more demanding applications *Ketjenblack* EC-600JD is available of which about half the amount is needed to obtain the same conductivity as with *Ketjenblack* EC-300J.

Ketjenblack is a registered trademark of Akzo Nobel Chemicals B.V. or affiliates in one or more territories.

All information concerning this product and/or suggestions for handling and use contained herein are offered in good faith and are believed to be reliable. AkzoNobel Functional Chemicals, however, makes no warranty as to accuracy and/or sufficiency of such information and/or suggestions, as to the product's merchantability or fitness for any particular purpose, or that any suggested use will not infringe any patent. Nothing contained herein shall be construed as granting or extending any license under any patent. Buyer must determine for himself, by preliminary tests or otherwise, the suitability of this product for his purposes. The information contained herein supersedes all previously issued bulletins on the subject matter covered. The user may forward, distribute, and/or photocopy this document only if unaltered and complete, including all of its headers and footers, and should refrain from any unauthorized use. You may not copy this document to a website.

Fuel Cell Store
T +1 979 703 1925
F +1 979 314 1122
E sales@fuelcellstore.com

www.fuelcellstore.com