

Ketjenblack EC-600JD

Electroconductive carbon black

Ketjenblack EC-600JD is a pure electroconductive carbon black extremely suitable for antistatic and electroconductive applications.

CAS number
1333-86-4

EINECS/ELINCS No.
215-609-9

TSCA status
listed on inventory

Specifications

Apparent bulk density	100-120 kg/m ³
Appearance	Black free-flowing pellets
Ash	≤0.1 %
Fines <125 micron	≤7 %
Grit content	≤30 mg/kg
Iodine absorption	1000-1100 mg/g
Moisture	≤0.5 %
pH	9.0-10.5
Pore volume, DBP	480-510 ml/100g
Volatiles	≤1.0 %

Applications

Ketjenblack EC-600JD is a very pure carbon black extremely suitable for antistatic and electroconductive applications. Due to its unique morphology and the extremely high surface area of approx. 1400 m²/g (BET), only one sixth the amount of Ketjenblack EC600-JD is needed compared to conventional electroconductive blacks in order to achieve the same conductivity. The extreme low loading of Ketjenblack EC600-JD allows easier processing for those compounds sensitive to filler addition, thus minimizing loss in mechanical and rheological properties. Ketjenblack EC-600JD when thoroughly dispersed with the polymer significantly increases the conductivity of the resulting compound. Ketjenblack EC-600JD can be used in all types of polymers, thermoset, thermoplastic as well as elastomers. Due to its unique morphology and structure with very low amounts of Ketjenblack EC-600JD excellent conductive material can be made. The loading needed to obtain a certain conductivity can vary significantly per type of polymer. More detailed information is available in the special Ketjenblack EC Technical Bulletin. Ketjenblack EC-600JD has a low ash content, which in addition with the extreme low loading level, makes it an excellent product for semicon applications in cable shielding. The low grit content provides very smooth surface during extrusion. Ketjenblack EC-600JD can also be used to produce conductive coatings and primers. Also here already at very low loading levels optimal electroconductive performance is obtained, which even more minimizes loss in mechanical and rheological properties compared to Ketjenblack EC-300J. With Ketjenblack EC-300J about double the amount is needed to obtain the same conductivity. Some other applications are batteries, packaging for IC parts, tubing, flooring, carpet backing, automotive parts, cell phones and many more.

Storage

Nouryon recommends to store Ketjenblack EC-600JD in a dry place away from direct sunlight. The packaging can be damaged if exposed to direct sunlight for more than 30 minutes.

Note

When stored under these recommended storage conditions, Ketjenblack EC-600JD will remain within the Nouryon specifications for a period of at least 12 months after delivery.

Packaging and transport

The standard packaging is 8 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 advise not to put the Ketjenblack EC-600JD including the bag into the mixing system. A full pallet carries 320 kg net. Both packaging and transport meet the international regulations. For the availability of other packed quantities contact your Nouryon representative. Ketjenblack EC-600JD is classified as a non-hazardous good according to national and international transport regulations.

Safety and handling

Please refer to the Safety Data Sheet (SDS) for further information on the safe storage, use and handling of Ketjenblack EC-600JD. This information should be thoroughly reviewed prior to acceptance of this product. The SDS is available at nouryon.com/sds-search.

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The Nouryon logo consists of a stylized blue 'N' followed by the word 'ouryon' in a lowercase, sans-serif font. The 'N' is significantly larger and more prominent than the rest of the text.