

Ketjenblack EC-300J

Electroconductive carbon black

Ketjenblack EC-300J 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	125-145 kg/m ³
Appearance	Black free-flowing pellets
Ash	≤ 0.05 %
Fines <125 micron	≤ 7 %
Grit content	≤ 30 mg/kg
Iodine absorption	740-840 mg/g
Moisture	≤ 0.5 %
pH	9.0-10.5
Pore volume, DBP	310-345 ml/100g
Volatiles	≤ 1.0 %

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.

Storage

Nouryon recommends to store Ketjenblack 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.

Note

When stored under the recommended storage conditions, Ketjenblack EC-300J will remain within the Nouryon 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 advise not to put the Ketjenblack 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 Nouryon representative. Ketjenblack EC-300J 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 detailed information on the safe storage, use and handling of Ketjenblack EC-300J. This information should be thoroughly reviewed prior to acceptance of this product. The SDS is available at [nouryon.com/sds-search](https://www.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 blue font.