Identification of the substance: Carbon black

Substance name	Carbon black
EC	215-609-9
CAS	1333-86-4
IUPAC	Carbon black
Molecular formula	Carbon black
Forms in the market	No data

Physical and chemical properties

Shape	No data
Size (nm)	No data

Toxicological information

Inhalation acute toxicity	Nontoxic
Dermal acute toxicity	No data
Oral acute toxicity	No data
Genotoxicity	Practically nontoxic
Cytotoxicity	Practically nontoxic

Ecotoxicological information

Freshwater Acute toxicity (Daphnia)	EC50 = > 100 mg/L (Nontoxic)
Freshwater Acute toxicity (Alga)	EC50 = > 5mg/L (Toxic)
Freshwater Acute toxicity (Fish)	No data
Soil invertebrates (worms)	No data
BAF-Bioaccumulation	No data

Application

Industrial uses	Ink and paints Additives
Improved properties	Strength Thermal properties UV Protection Electrical properties Antistatic Stability properties
Polymeric matrix	Polyacetylene (PA), poly(p-phenylene) (PPP), poly(p-phenylene vinylene) (PPV), poly(p-phenylene sulfide) (PPS), polyaniline (PANI), polypyrrole (PPy) and polythiophene (PT).
Recommendations, comments	Reinforcement effect in fillers is influenced by the interaction between the elastomer molecules, between the carbon black particles themselves, and between the carbon black particles and the elastomer matrix.