Identification of the substance: Single Walled Nanotube

Substance name	Single Walled Nanotube
EC	231-153-3
CAS	308068-56-6
IUPAC	Single-Walled Carbon Nanotubes
Molecular formula	C
Forms in the market	Powder

Physical and chemical properties

Shape	Nanotube
Size (nm)	Diameter: 1,4 nm; Length: > 10 µm

Toxicological information

Inhalation acute toxicity	No data
Dermal acute toxicity	No data
Oral acute toxicity	LD50 = >50 mg/kg bw (Toxic)
Genotoxicity	Toxic Nontoxic
Cytotoxicity	Nontoxic

Ecotoxicological information

Freshwater Acute toxicity (Daphnia)	EC50 = >10 mg/L (Practically nontoxic) EC50 = 1.306 mg/L (Toxic)
Freshwater Acute toxicity (Alga)	EC50 = > 10mg/L (Practically nontoxic)
Freshwater Acute toxicity (Fish)	LC50 = > 10 mg/L (Practically nontoxic) LC50 = > 10 mg/L (Practically nontoxic)
Soil invertebrates (worms)	No data
BAF-Bioaccumulation	No data

Application

Industrial uses	Plastic Additives
Improved properties	Toughness Mechanical properties Bonding strength Tensile strength Elastic module
Polymeric matrix	Polymethyl methacrylate (PMMA), polypropylene (PP), thermoplastic polyurethane (PU), polyamide 66, polyamide 12, high density polyethylene (HDPE), low density polyethylene (LDPE), ethylene vinyl acetate (EVA), acrylonitrile butadiene styrene (ABS), polycarbonate (PC), fluorocarbons, nitrile rubber, poly(vinyl alcohol) (PVA), chitosan, polyimide (PI), polystyrene (PS), polyacrylonitrile polyaniline (PANI)
Recommendations, comments	Strengthened epoxy prepreg for numerous composites applications. Use molecular dispersion technology to ensure enhancements are evenly distributed throughout the resin