

Type of soot	mCAST black	mCAST brown	FW200	LB_OEC	LB_RC	FS
Source	miniCAST ^a	miniCAST ^a	Orion Engineered Carbons color black FW200 powder gas black process	Orion Engineered Carbons Flammruss FR101 powder lamp black process	Natural Pigments Inc. lamp black process	Product no. 572497, lot no. MKBB8240V
Form/dispersion method	Combustion	Combustion	Powder/FBG ^e	Powder/FBG ^e	Powder/FBG ^e	Powder/FBG ^e
General classification			Amorphous CAS no. 1333-86-4	Amorphous CAS no. 1333-86-4	Amorphous CAS no. 1333-86-4	C ₆₀ (78.7 %), C ₇₀ (18.8 %), > C ₇₀ (1.6 %), Fullerene oxides (0.9 %)
\bar{d}_{pp} (nm)	31	21	22; 13 ^b	119; 95 ^b	152; 95 ^f	41
$\sigma(d_{pp})$ (nm)	5.9	4.9	3.9	43	55.7	12.9
Primary particles analyzed	122	129	166	141	137	142
ML _{950°C} (%)	15.62	18.58	31.43; 20 ^c	0.97	2.8	33.37
a_{BET,N_2} (m ² g ⁻¹) ^d	120	70	526	24	23 (20) ^f	265
D_{fm} (-)	1.86	2.31	2.35	2.64	2.83	2.5
Ice nucleation studies	Möhler et al. (2005b) Crawford et al. (2011) Friedman et al. (2011)			Dymarska et al. (2006) DeMott et al. (1999)	see LB_OEC	