

DiamondTM

BLEND

Datasheet
Revision 0.9
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Nanodiamond containing mixture with low content of incombustible impurities

Carbodeon uDiamondTM specific characteristics

▶ Nanodiamond crystal size	4 – 6 nm
▶ Total carbon fraction in solid phase, no less than	85 wt. %
▶ Nanodiamond content in solid phase, no less than	27 wt. %
▶ Oxidable carbon content in solid phase, less than	70 wt. %
▶ Incombustible impurity content in solid phase	1.4 – 2.2 wt. %
▶ Bulk density of nanodiamond phase	~ 0.5 g/cm ³
▶ Pycnometric density of nanodiamond phase	~ 3.1 – 3.2 g/cm ³
▶ Specific surface area of nanodiamond phase	~ 330 g/m ²
▶ Constant of crystal lattice of nanodiamond phase	0.3573 ± 0.0005 nm
▶ Moisture content	≥ 5 %

Main application areas include

- ▶ Oil and lubricant additives
- ▶ Refrigerant liquid additives
- ▶ Polymer-diamond composites
- ▶ Electrolytic coatings

