



Description of the subject matter of the contract – DND and HPHT nanodiamond powders

Part I DND nanodiamond powders and suspensions

1) Nanodiamond powder with nitrogen centres:

- size of nanodiamond powder: 1µm
- weight of powder: 1g
- high concentration of nitrogen centres: above 4ppm

2) Nanodiamond suspension with nitrogen centres:

- size of nanodiamond powder: 140nm
- quantity: 50ml
- high concentration of nitrogen centres: above 3ppm

3) Nanodiamond suspension with nitrogen centres:

- size of nanodiamond powder: 40nm
- quantity: 50ml
- high concentration of nitrogen centres: above 2ppm

4) Nanodiamond powder:

- size of nanodiamond powder: 140nm
- weight of powder: 300g

Part II: HPHT nanodiamond powders

1) Nanodiamond Powder:

- weight 100 g
- size of nanodiamond powder: 0.75 -1.25 µm
- size median: 1µm
- maximum size of crystals: 1.7 µm

2) Nanodiamond powder:

- weight 100 g
- size of nanodiamond powder: 0 -0.25 µm
- size median: 0.125µm
- maximum size of crystals: 0.33 µm

3) Nanodiamond suspension:

- weight 1Kg
- size of nanodiamond powder: 0.75 -1.25 µm
- size median: 1µm
- maximum size of crystals: 1.7 µm
- concentration 10% wt. DI Water

4) Nanodiamond suspension:

- weight 1Kg
- size of nanodiamond powder: 0 -0.25 µm
- size median: 0.125µm
- maximum size of crystals: 0.33 µm
- concentration 10% wt. DI Water