

## Adámas Product Catalog - 2017

|                                      |    |
|--------------------------------------|----|
| <b>Fluorescent Nanodiamond</b> ..... | 2  |
| Fluorescent Red ND .....             | 2  |
| Fluorescent Green ND.....            | 3  |
| Fluorescent Functionalized ND.....   | 3  |
| Fluorescent Microdiamond ND.....     | 4  |
| <b>Seeding Slurry</b> .....          | 5  |
| <b>ND Suspensions</b> .....          | 6  |
| 5nm Slurries in Water .....          | 6  |
| 10 nm Slurries in Water .....        | 6  |
| 15 nm Slurries in Water .....        | 7  |
| 80 nm Slurries in Water .....        | 7  |
| 5 nm Slurries in Solvents .....      | 7  |
| <b>ND Powder</b> .....               | 8  |
| Raw DND Positive Zeta.....           | 8  |
| Raw DND Negative Zeta .....          | 9  |
| Carboxylated DND Powder .....        | 9  |
| Hydroxylated DND Powder .....        | 10 |
| Aminated DND .....                   | 10 |
| <b>Boron Doped ND</b> .....          | 11 |
| <b>Oil Additives</b> .....           | 11 |

## Fluorescent Nanodiamond



### Fluorescent Red ND

| Product   | Catalog #        | Price      |
|---|------------------|------------|
| 10-13nm average size, 0.1wt% slurry in H2O                      | NDNV10nmMd2ml    | \$200      |
| 10-13nm average size, 0.1wt% slurry in H2O                      | NDNV10nmMd10ml   | \$570      |
| "High brightness" 20-25nm average size, 0.1% slurry in DI water | NDNV20nmHi10ml   | \$470.00   |
| High Brightness; 100nm 1 mg/mL in DI H2O suspension             | NDNV100nmHi100ml | \$3,000.00 |
| High Brightness; 100nm 1 mg/mL in DI H2O suspension             | NDNV100nmHi10ml  | \$350.00   |
| High brightness; 100nm 1 mg/mL in Isopropanol, 10ml             | NDNV100nmHiIPA   | \$380.00   |
| High brightness; 140nm, 1 mg/mL in DI H2O suspension            | NDNV140nmHi10ml  | \$270.00   |
| Medium brightness; 140nm, 1 mg/mL in DI H2O suspension          | NDNV140nmMd10ml  | \$170.00   |
| "High brightness" 30nm average size, 0.1% slurry in DI water    | NDNV30nmHi10ml   | \$470.00   |
| High brightness; 35-40nm 1 mg/mL in DI H2O suspension 10ml      | NDNV40nmHi10ml   | \$400.00   |

### Fluorescent Green ND

| Product   | Catalog #        | Price    |
|---|------------------|----------|
| 70nm, carboxylic surface groups, 1 mg/mL in DI H2O suspension 10ml  | NDNVN70nmMd10ml  | \$550.00 |
| 120nm, carboxylic surface groups, 1 mg/mL in DI H2O suspension 10ml | NDNVN120nmMd10ml | \$450.00 |
| 140nm, carboxylic surface groups, 1 mg/mL in DI H2O suspension 10ml | NDNVN140nmMd10ml | \$450.00 |

### Fluorescent Functionalized ND

| Product  | Catalog #             | Price    |
|--|-----------------------|----------|
| High brightness; 100nm; aminated with APTES; powder 10mg | NDNV100nmHiAPTES10mg  | \$650.00 |
| 100nm; High brightness. 10mg, conjugated with biotin     | NDNV100nmHibiotin10mg | \$950.00 |
| 100nm; High brightness. 2mg, conjugated with biotin      | NDNV100nmHibiotin2mg  | \$410.00 |
| High brightness; 100nm; Hydrogenated; powder 10mg        | NDNV100nmHiH10mg      | \$580.00 |
| 100nm Hi Fluorescent Aminated, 10mg                      | NDNV100nmHiNH210mg    | \$650.00 |
| High brightness; 100nm; hydroxylated; powder 10mg        | NDNV100nmHiOH10mg     | \$550.00 |

|  |                     |          |
|--|---------------------|----------|
| ND-NV 100nm PEG functionalized;High brightness, 10mg                 | NDNV100nmHiPEG10mg  | \$650.00 |
| ND-NV 100nm Streptavidin functionalized; High brightness, 2mg        | NDNV100nmHiSA2mg    | \$470.00 |
| Medium brightness; 100nm; carboxylated; 1mg/ml slurry in water 10 ml | NDNV100nmMdCOOH10ml | \$450.00 |
| Medium brightness; 100nm Carboxylated, 1 mg/mL slurry in water 2ml   | NDNV100nmMdCOOH2ml  | \$170.00 |
| Medium brightness; 100nm; hydroxylated; powder 10mg                  | NDNV100nmMdOH10mg   | \$400.00 |
| High brightness; 40nm, 2mg, conjugated with biotin                   | NDNV40nmHibiotin2mg | \$440.00 |
| High brightness; 40nm; hydroxylated; powder 10mg                     | NDNV40nmHiOH10mg    | \$570.00 |
| High brightness; 40nm Streptavidin functionalized, 2mg               | NDNV40nmHiSA2mg     | \$500.00 |
| Medium brightness; 50-60nm; Hydrogenated; powder 10mg                | NDNV50nmMdH10mg     | \$590.00 |

### Fluorescent Microdiamond ND

| Product                                | Catalog #       | Price      |
|--|-----------------|------------|
| FMD-1um-NV high brightness 50mg        | MDNV1umHi50mg   | \$450.00   |
| FMD-1um-NV high brightness 1 gram      | MDNV1umHi1g     | \$4,500.00 |
| 50 milligrams, 150um, ~4ppm NV, powder | MDNV150umHi50mg | \$250.00   |

|                                   |                |            |
|-----------------------------------|----------------|------------|
| 1 gram, 150um, ~4ppm NV, powder   | MDNV150umHi1g  | \$3,000.00 |
| FMD-1um-NV high brightness 50mg   | MDNVN1umHi50mg | \$450.00   |
| FMD-1um-NV high brightness 1 gram | MDNVN1umHi1g   | \$4,500.00 |

**Seeding Slurry**



| <b>Product</b>                         | <b>Catalog #</b> | <b>Price</b> |
|--|------------------|--------------|
| 5-10nm average particle size, 0.5wt%   | BlueSeeds1L      | \$1,100.00   |
| 5-10nm average particle size, 0.5wt%   | BlueSeeds200ml   | \$395.00     |
| 5-10nm average particle size, 0.5wt%   | BlueSeeds3L      | \$3,000.00   |
| 5-10nm average particle size, 0.5wt%   | BlueSeeds400ml   | \$595.00     |
| 20-30nm average aggregate size, 0.5wt% | OpalSeeds1L      | \$950.00     |
| 20-30nm average aggregate size, 0.5wt% | OpalSeeds200ml   | \$295.00     |
| 20-30nm average aggregate size, 0.5wt% | OpalSeeds3L      | \$2,700.00   |
| 20-30nm average aggregate size, 0.5wt% | OpalSeeds400ml   | \$495.00     |

## ND Suspensions



### 5nm Slurries in Water

| Product   | Catalog #       | Price    |
|---|-----------------|----------|
| Average particle size 5 nm, zeta potential -50mV, carboxylated, 1wt% slurry in DI water | ND5nmNH2O1000ml | \$750.00 |
| Average particle size 5 nm, zeta potential -50mV, carboxylated, 1wt% slurry in DI water | ND5nmNH2O100ml  | \$98.00  |
| Average particle size 5 nm, zeta potential -50mV, carboxylated, 1wt% slurry in DI water | ND5nmNH2O500ml  | \$400.00 |
| Average particle size 5 nm, zeta potential +45mV, 1wt% slurry in DI water               | ND5nmPH2O1000ml | \$600.00 |
| Average particle size 5 nm, zeta potential +45mV, 1wt% slurry in DI water               | ND5nmPH2O100ml  | \$90.00  |
| Average particle size 5 nm, zeta potential 45mV, 1wt% slurry in DI water                | ND5nmPH2O500ml  | \$375.00 |

### 10 nm Slurries in Water

| Product  | Catalog #        | Price    |
|--|------------------|----------|
| Average particle size 10-15nm, zeta potential -45mV, carboxylated, 1wt.% | ND10nmNH2O1000ml | \$600.00 |
| Average particle size 10-15nm, zeta potential -45mV, carboxylated, 1wt.% | ND10nmNH2O100ml  | \$90.00  |
| Average particle size 10-15nm, zeta potential -45mV, carboxylated, 1wt.% | ND10nmNH2O500ml  | \$375.00 |

### 15 nm Slurries in Water

| Product  | Catalog #        | Price      |
|--|------------------|------------|
| Average particle size 15-20nm, ~1% metal impurities, zeta potential -45mV, carboxylated, 5wt.% in DI water (50g ND)  | ND15nmNH2O1000ml | \$1,000.00 |
| Average particle size 15-20nm, ~1wt% metal impurities, zeta potential -45mV, carboxylated, 5wt.% in DI water (5g ND) | ND15nmNH2O100ml  | \$150.00   |
| Average particle size 15-20nm, ~1% metal impurities, zeta potential -45mV, carboxylated, 5wt.% in DI water (250g ND) | ND15nmNH2O5000ml | \$3,750.00 |

### 80 nm Slurries in Water

| Product   | Catalog #       | Price    |
|---|-----------------|----------|
| Average particle size 80nm, zeta potential +45mV, 10wt% stable slurry | ND80nmPH2O100ml | \$170.00 |
| Average particle size 80nm, zeta potential +45mV, 10wt% stable slurry | ND80nmPH2O500ml | \$750.00 |

### 5 nm Slurries in Solvents

| Product   | Catalog #          | Price       |
|---|--------------------|-------------|
| 1kg of ND, average particle size 5 nm, fully deagglomerated, polyfunctional surface groups, positive zeta potential, 5wt% in DMSO, 20Liters | ND5nmDMSO1kg       | \$25,000.00 |
| Average particle size 5 nm, fully deagglomerated 1wt% in Ethylene glycol  | ND5nmEG100ml       | \$250.00    |
| Average particle size 5 nm, fully deagglomerated 1wt% in Kerosene proprietary dispersant  | ND5nmKerosene100ml | \$250.00    |

|   |                  |          |
|---|------------------|----------|
| Average particle size 5 nm, fully deagglomerated 1wt% in N-Methyl-2-pyrrolidone                                   | ND5nmNMP100ml    | \$300.00 |
| Average particle size 5 nm, fully deagglomerated, Hydroxylated (-OH) 1wt% in Dimethyl sulfoxide                   | ND5nmOHDMSO100ml | \$350.00 |
| Average particle size 5 nm, fully deagglomerated 1wt% in Polyolefin proprietary dispersant                        | ND5nmPAO100ml    | \$250.00 |
| Average particle size 5 nm, fully deagglomerated 1wt% in Tetrahydrofuran, proprietary dispersant, packaged 4x25ml | ND5nmTHF100ml    | \$370.00 |
| Polishing Nanodiamond slurry in de-ionized water, 500ml   | NDPolish500ml    | \$120.00 |

## ND Powder



### Raw DND powder

#### (Positive Zeta potential)

| Product  | Catalog #      | Price      |
|--|----------------|------------|
| 0.7wt% ash content, 220nm average aggregate size, Z potential +35mV in DI H2O. Polyfunctional surface. Moderate colloidal stability in DI water. | NDLStandard1kg | \$1,950.00 |
| .7wt% ash content, 180nm average aggregate size, Z potential +25mV in DI H2O. Polyfunctional surface. Moderate colloidal stability in DI water.  | NDMStandard1kg | \$2,900.00 |
| 1.7wt% ash content, 160nm average aggregate size, Z potential +20mV in DI H2O. Polyfunctional surface. Moderate colloidal stability in DI water. | NDStandard100g | \$380.00   |



1.7wt% ash content, 160nm average aggregate size, Z potential +20mV in DI H<sub>2</sub>O. Polyfunctional surface. Moderate colloidal stability in DI water.

NDStandard1kg

\$2,700.00

**Raw DND powder**  
**(Negative Zeta potential)**

| Product   | Catalog # | Price      |
|---|-----------|------------|
| ~1.0% ash content; average aggregate size 140nm. zeta potential -35mV in DI water; Acidic surface groups; Moderate colloidal stability in DI water. | DND1-100g | \$700.00   |
| ~2.0% ash content; average aggregate size 140nm. zeta potential -30mV in DI water; Acidic surface groups; Low colloidal stability in DI water.      | DND2-100g | \$400.00   |
| ~2.0% ash content; average aggregate size 140nm. zeta potential -30mV in DI water; Acidic surface groups; Low colloidal stability in DI water.      | DND2-10g  | \$100.00   |
| ~2.0% ash content; average aggregate size 140nm. zeta potential -30mV in DI water; Acidic surface groups Low colloidal stability in DI water        | DND2-1kg  | \$3,500.00 |

**Carboxylated DND Powder**

| Product   | Catalog #    | Price   |
|---|--------------|---------|
| 0.6% ash content; zeta potential -45mV; average aggregate size 30-40nm Functionalized with carboxylic groups. High colloidal stability in DI water. Priced per gm.  | NDCOOH30nm1g | \$55.00 |
| 0.6% ash content; zeta potential -45mV; average aggregate size 60-80nm. Functionalized with carboxylic groups. High colloidal stability in DI water. Priced per gm. | NDCOOH60nm1g | \$35.00 |

|   |                   |            |
|---|-------------------|------------|
| 0.6% ash content; zeta potential -45mV;<br>average aggregate size 130nm<br>Functionalized with carboxylic groups. High colloidal stability in DI water. | NDStCOOH130nm100g | \$900.00   |
| 0.6% ash content; zeta potential -45mV;<br>average aggregate size 130nm<br>Functionalized with carboxylic groups. High colloidal stability in DI water. | NDStCOOH130nm10g  | \$170.00   |
| 0.6% ash content; zeta potential -45mV;<br>average aggregate size 130nm<br>Functionalized with carboxylic groups. High colloidal stability in DI water. | NDStCOOH130nm1kg  | \$7,000.00 |

### Hydroxylated DND Powder

| Product   | Catalog #   | Price   |
|---|-------------|---------|
| 0.6% ash content; zeta potential +30mV;<br>Functionalized with hydroxyl groups. High colloidal stability in DI water. Price per gm. | NDOH100nm1g | \$55.00 |
| 0.6% ash content; zeta potential +30mV;<br>Functionalized with hydroxyl groups. High colloidal stability in DI water. Price per gm. | NDOH30nm1g  | \$95.00 |
| 0.6% ash content; zeta potential +30mV;<br>Functionalized with hydroxyl groups. High colloidal stability in DI water. Price per gm. | NDOH60nm1g  | \$75.00 |

### Aminated DND Powder

| Product  | Catalog #     | Price    |
|--|---------------|----------|
| 0.6% ash content; zeta potential +20mV;<br>Functionalized with amino groups. Price per gm. | NDNH2-100nm1g | \$80.00  |
| 0.6% ash content; zeta potential +20mV;<br>Functionalized with amino groups. Price per gm. | NDNH2-60nm1g  | \$100.00 |

## Boron Doped ND



| Product  | Catalog #    | Price    |
|--|--------------|----------|
| Boron doped ND (<500ppm B); 40nm, 5mg/ml in DI water | BDND40nm50ml | \$150.00 |

## Oil Additives



| Product  | Catalog #         | Price    |
|--|-------------------|----------|
| 4oz. additive for passenger cars (1 bottle of D-Tribo additive per 4-6 quarts of motor oil)          | DTribo4oz         | \$25.00  |
| up to 16oz. additive for heavy duty vehicles (for up to 10 quarts of motor oil)                      | DTriboHD16oz      | \$80.00  |
| Nanodiamond slurry in polyalphaolefin (PAO) oil (1% nanodiamonds in polyalphaolephin - PAO), 1 Liter | DbaseTribo1L      | \$150.00 |
| Nanodiamond slurry in polyalphaolefin (PAO) oil (1% of nanodiamonds in polyalphaolephin - PAO)       | DbaseTribo1Gallon | \$500.00 |

*DISCLAIMER: Product characteristics, specifications, costs, part numbers, and all other details are accurate as of the date of preparation of this document. These values are subject to change. Product characteristics are subject to batch to batch variability and improvements in processing or other developments.*