

# CATALOG 2016 - II

Nanodiamond Powders						
#	Product	Description	Reference	Packing	Quantity	Price, USD
1	<b>RayND</b> <b>Code: 100</b>	Nanodiamond powder of laser synthesis, Incombustible residue: < 0.01 wt.%; possibly customized	Average grain size: 4.0-5.0 nm	Double plastic packaging	1 g	20
					10 g	190
					100 g	1800
					1 kg	15000
2	<b>RayND-AL</b> <b>Code: 104</b>	Nanodiamond powder of laser synthesis, modified, aminated; incombustible residue: < 0.01 wt. %	<b>Hydro- &amp; Lyophilic;</b> Average grain size: 3.0-5.5 nm	Double plastic packaging	5 g	110
					25 g	500
					50 g	1000
					100 g	2000
3	<b>RayND-M</b> <b>Code: 105</b>	Nanodiamond powder of laser synthesis, modified, metal free, ferro-magnetic; incombustible residue: < 0.01 wt. %	<b>Magnetic;</b> Average grain size: 3.0-5.5 nm	Double plastic packaging	1 g	250
4	<b>RT-DND</b> <b>Code: 110</b>	Detonation nanodiamond powder, purified, non-modified, incombustible residue: < 0.1 wt. %	Average grain size: 3.0-5.5 nm	Double plastic packaging	10 g	25
					100 g	200
					500 g	900
					1 kg	1700
5	<b>RT-DND-P</b> <b>Code: 111</b>	Detonation nanodiamond powder, purified, static surface charge; incombustible residue: < 0.1 wt. %	<b>Lyophobic,</b> Average grain size: 3.0-5.5 nm	Double plastic packaging	10 g	30
					100 g	240
					500 g	1100
					1 kg	2000
6	<b>RT-DND-B</b> <b>Code: 112</b>	Detonation nanodiamond powder, purified, modified, alkylated; incombustible residue: < 0.1 wt. %	<b>Hydrophobic;</b> Average grain size: 3.0-5.5 nm	Double plastic packaging	10 g	35
					100 g	260
					500 g	1200
					1 kg	2200
7	<b>RT-DND-L</b> <b>Code: 113</b>	Detonation nanodiamond powder, purified, modified, hydroxylated; incombustible residue: < 0.1 wt. %	<b>Hydrophilic;</b> Average grain size: 3.0-5.5 nm	Double plastic packaging	10 g	45
					100 g	350
					500 g	1600
					1 kg	3000
8	<b>RT-DND-AL</b> <b>Code: 114</b>	Detonation nanodiamond powder, purified, modified, aminated; incombustible residue: < 0.1 wt. %	<b>Hydro- &amp; Lyophilic;</b> Average grain size: 3.0-5.5 nm	Double plastic packaging	10 g	100
					100 g	800
					500 g	3700
					1 kg	7000
9	<b>RT-DND-Fe</b> <b>Code: 116</b>	Detonation nanodiamond powder, purified, Fe-doped, magnetic; incombustible residue: < 0.8 wt. %	<b>Magnetic;</b> Average grain size: 3.0-5.5 nm	Double plastic packaging	10 g	100
					100 g	800
					500 g	3700
					1 kg	7000
10	<b>RT-DND-AB</b> <b>Code: 117</b>	Detonation nanodiamond powder, purified, modified, aminated; incombustible residue: < 0.1 wt. %	<b>Hydrophobic &amp; Lyophilic,</b> Average grain size: 3.0-5.5 nm	Double plastic packaging	10 g	70
					100 g	500
					500 g	2500
					1 kg	4800
11	<b>RT-HPHT-L</b> <b>Code: 133</b>	High Pressure High Temperature Crushed nanodiamond powder, purified, modified, hydroxylated; incombustible residue: < 0.1 wt. %	<b>Hydrophilic &amp; Lyophobic;</b> Average grain size: 30-50 nm	Double plastic packaging	10 g	35
					100 g	300
					500 g	1300
					1 kg	2500
12	<b>RT-HPHT-AL</b> <b>Code: 134</b>	High Pressure High Temperature Crushed nanodiamond powder, purified, modified, hydroxylated & aminated; incombustible residue: < 0.1 wt. %	<b>Hydro- &amp; Lyophilic;</b> Average grain size: 30-50 nm	Double plastic packaging	10 g	100
					100 g	800
					500 g	3700
					1 kg	7000

## Nanodiamond Slurries for Various Applications

#	Product	Description	Reference	Packing	Quantity	Price, USD
1	<b>RayND-SP Code: 201</b>	Single particles nanodiamond water suspension with RayND concentration of more than 1.7 wt. %, pH=3.5-4.5	Hydroxyle, stable. Average grain size: 4.0-5.0 nm	Glass or plastic bottle	10 ml	100 In future: 1000 \$/l
2	<b>RayND-W-4A Code: 202</b>	Nanodiamond water suspension; concentration 4 wt.% RayND, highly dispersed, pH of wide range	Aminated, stable; Average grain size: 4.0-5.0 nm	Glass or plastic bottle	10 ml	50
					100 ml	400
					1 liter	1500
3	<b>RT-DND-SP Code: 211</b>	Single particles nanodiamond water suspension with DND concentration of more than 1.7 wt.%, pH=3.5-4.5	Hydroxyle, stable. Aver. grain size: 3.0-5.5nm	Glass or plastic bottle	10 ml	15
					100 ml	100
					1 liter	800
4	<b>RT-W-4 Code: 212</b>	Nanodiamond water suspension; concentration 4 wt.% highly dispersed, pH of wide range	Aminated, stable. Average grain size: 3.0-5.5 nm	Glass or plastic bottle	10 ml	15
					100 ml	100
					1 liter	800
5	<b>RT-Ac-4 Code: 213</b>	Nanodiamond acetone suspension, concentration 4 wt.%, highly dispersed	Aminated, stable. Average grain size: 3.0-5.5 nm	Glass or plastic bottle	10 ml	15
					100 ml	100
					1 liter	800
6	<b>RT-IPA-4 Code: 214</b>	Nanodiamond isopropyl alcohol suspension, concentration 4 wt.%, highly dispersed	Aminated, stable. Average grain size: 3.0-5.5 nm	Glass or plastic bottle	10 ml	15
					100 ml	100
					1 liter	800
7	<b>RT-NMP-4 Code: 215</b>	Nanodiamond N-methyl-pyrrolidone suspension, concentration 4 wt.%, highly dispersed	Aminated, stable. Average grain size: 3.0-5.5 nm	Glass or plastic bottle	10 ml	20
					100 ml	100
					1 liter	800
8	<b>RT-EtOH-4 Code: 217</b>	Nanodiamond ethyl alcohol suspension, concentration 4 wt.%, highly dispersed	Aminated, stable. Average grain size: 3.0-5.5 nm	Glass or plastic bottle	10 ml	20
					100 ml	100
					1 liter	800
9	<b>RT-ETA-4 Code: 217</b>	Nanodiamond ethanolamine suspension, concentration 4 wt.%, highly dispersed	Aminated, stable. Average grain size: 3.0-5.5 nm	Glass or plastic bottle	10 ml	20
					100 ml	100
					1 liter	800
10	<b>RT-Di50H-W1 Code: 221</b>	HPHT crashed nanodiamond water suspension, concentration 3 wt.%, highly dispersed	Hydrixy, stable. Average grain size: 35-50 nm	Glass or plastic bottle	10 ml	20
					100 ml	100
					1 liter	800
11	<b>RT-Di50A-W3 Code: 225</b>	HPHT crashed nanodiamond water suspension, concentration 3 wt.%, highly dispersed	Aminated, stable. Average grain size: 35-50 nm	Glass or plastic bottle	10 ml	20
					100 ml	100
					1 liter	800
12	<b>RT-Gr-W-1 Code: 232</b>	Graphene water suspension, concentration 1 wt.%, highly dispersed	Stable; Particle length: 5-7 $\mu$ m	Glass or plastic bottle	10 ml	150
					50 ml	700
					100 ml	1200
13	<b>RT-Gr-Ac-1 Code: 233</b>	Graphene acetone suspension, concentration 1 wt.%, highly dispersed	Stable; Particle length: 5-7 $\mu$ m	Glass or plastic bottle	10 ml	150
					50 ml	700
					100 ml	1200
14	<b>RT-PEO-3 Code: 216</b>	Nanodiamond Polyester oil suspension, concentration 3 wt.%, highly dispersed	Stable; Average grain size: 3.0-5.5 nm	Glass or plastic bottle	10 ml	20
					100 ml	110
					1 liter	900
					5 liter	4000

All suspensions are prepared without surfactants.

In addition to this list, Ray provides customized nanodiamond suspensions in accordance to consumers' needs.

We also offer the process development for dispersing nanodiamonds within any media.

## Nanodiamond Products for Industry

#	Product	Description	Reference	Packing	Quantity	Price, USD
1	RT-Gel Code: 311	Nanodiamond water-based gel for lapping, finishing	Stable; Average grain size: 4-5 nm	Plastic bucket	100 ml	60
					500 ml	250
					1 liter	400
2	RT-Lub Code: 312	Nanodiamond additive to lubricating oils for antifriction treatment; recommended dilution 1/25	Stable; Average grain size: 3.0-5.5 nm	Plastic bucket	200 ml	25
					1 liter	100
					5 liters	450
3	RT-Lap Code: 313	Organic-based grease for ceramics /optic crystals lapping / finishing containing 15 wt.% modified nanodiamonds	Stable; Average grain size: 3.0-5.5 nm	Plastic bucket	100 g	100
					500 g	450
					1 kg	860
4	RT-Lap-A Code: 314	Water-soluble organic-based antiwear grease for lapping / finishing / running-in; 15 wt.% modified nanodiamonds	Stable; Average grain size: 3.0-5.5 nm	Plastic bucket	100 g	150
					500 g	500
					1 kg	900
5	Adigriz Code: 315	Additive to lubricating greases for antifriction treatment; recommended dilution 1/10	Stable; Average grain size: 3.0-5.5 nm	Plastic bucket	100 g	30
					1 kg	200
					5 kg	800
5	Copper-Plast Code: 316	Nanodiamond fluid for hydrodynamic lubrication at forming copper parts by pressure (forging, extrusion, swaging)	Stable; Average grain size: 3.0-5.5 nm	Plastic bucket	1 liter	80
					4 liters	300
					20 liters	1300
6	RT-PP-Si Code: 512	Nanodiamond polishing paste for lapping of silicon and silicon-carbide wafers and optic crystals	Stable; Average grain size: 3.0-5.5 nm	Plastic bucket	100 g	120
					1 kg	1000
					10 kg	8000
7	TG NanoHeat Code: 611	Nanodiamond thermal grease for electronics, heat conductive & electrically insulating	Density: 1.2 g/cm <sup>3</sup> , work temperature: -40 ÷ +185 °C	Syringe	10 ml	15
				10 syringes	100 ml	120
				Plastic jar	100 ml	70
				Plastic jar	1 liter	600
8	RT-Cool-Si Code: 411	Nanodiamond coolant for high-speed dicing of silicone wafers, recommended dilution 1/20	Stable; Average grain size: 3.0-5.5 nm	Plastic container	2 liter	220
9	RT-Cool-Gl Code: 412	Nanodiamond coolant for high-speed dicing of glass wafers, recommended dilution 1/20	Stable; Average grain size: 3.0-5.5 nm	Plastic container	2 liters	200

Dear Sirs,

Thank you very much for the interest to our products.

In the case of ordering, please fill the attached ORDER FORM and send it via email [info@nanodiamond.co.il](mailto:info@nanodiamond.co.il) .

An invoice for payment will be sent you soon. **Please do not forget to report a money transfer by email.**

Goods will be dispatched on receipt of the payment. In all cases Ray Techniques Ltd. will make every effort to ship the goods as soon as possible.

The prices do not include shipping, insurance and bank charges.

**This product catalog is valid by the end of June 2016.**

Please feel free to contact, if you need more information about our goods and the terms of delivery.

We are always at your service.

Ray Techniques' Administration