

CATALOG



2024 - I

Carbon Nanopowders						
#	Product	Description	Reference	Weight	Packing	Price, \$
1	RayND Code: 100	Nanodiamond powder of laser synthesis, customized surface functionalization	Average grain size: 4.0-4.5 nm; ash residue: <0.02 wt.%. The price is planned to drop.	2 g	Glass vial	80
				10 g	Plastic vial	180
				100 g	Plastic bottle	1600
2	RayND-AL Code: 104	Nanodiamond powder of laser synthesis, hydroxylated & nitrogenized; metal free; for biomed research	Hydrophilic & Lyophilic, PL; average grain size: 4.0-4.5 nm; ash residue: <0.02 wt.%	2 g	Glass vial	90
				10 g	Plastic vial	200
				100 g	Plastic bottle	2000
3	RT-DND Code: 110	Nanodiamond powder of detonation synthesis, purified, graphite & metal free, non-modified; for various applications	Polydispersed; average grain size: 3.5-6.0 nm; ash residue: <0.1 wt.%	10 g	Plastic vial	80
				100 g	Plastic bottle	275
				500 g	Plastic jar	1100
4	RT-DND-B Code: 112	Detonation nanodiamond powder, purified, eliminated radicals; for metal & ceramic composites, dry lubrication, nuclear appl.	Hydrophobic, lyophobic; average grain size: 3.5-6.0 nm; ash residue: <0.1 wt.%	10 g	Plastic vial	80
				100 g	Plastic bottle	375
				500 g	Plastic jar	1480
5	RT-DND-L Code: 113	Detonation nanodiamond powder, purified, hydroxylated; additive to water-based greases & compatible plastics (PE)	Hydrophilic, lyophobic; average grain size: 3.5-6.0 nm; ash residue: <0.1 wt.%	10 g	Plastic vial	80
				100 g	Plastic bottle	300
				500 g	Plastic jar	1200
6	RT-DND-LN Code: 114	Detonation nanodiamond powder, purified, nitrogenized; for ABS plastics & compatible rubbers, DMSO & acetone colloids	Hydrophobic, lyophilic; high PL; average grain size: 3.5-6.0 nm, ash residue: <0.1 wt.%	10 g	Plastic vial	80
				100 g	Plastic bottle	365
				500 g	Plastic jar	1460
7	RT-DND-BM Code: 115	Detonation nanodiamond powder, purified, ethylated; for compatible synthetic oils, paints and varnishes	Hydrophobic, lyophilic; average grain size: 3.5-6.0 nm; ash residue: <0.1 wt.%	10 g	Plastic vial	80
				100 g	Plastic bottle	375
				500 g	Plastic jar	1500
8	RT-DND-C Code: 116	Detonation nanodiamond powder, purified, carboxylated; additive to coolants, inks & water-based polishing slurries	Hydrophilic, lyophobic; average grain size: 3.5-6.0 nm; ash residue: <0.1 wt.%	10 g	Plastic vial	80
				100 g	Plastic bottle	325
				500 g	Plastic jar	1300
9	RT-DND-EI Code: 118	Detonation nanodiamond powder, purified, alkylated & nitrogenized; for sintering and compatible polymers (PC, PA, Teflon)	Hydrophobic, lyophobic; average grain size: 3.5-6.0 nm; ash residue: <0.1 wt.%	10 g	Plastic vial	80
				100 g	Plastic bottle	400
				500 g	Plastic jar	1600
10	RT-DND-NH Code: 119	Detonation nanodiamond powder, purified, nitrogenized & hydroxylated; for coolants & wet polymer additives	Hydrophilic, lyophilic, high PL; average grain size: 3.5-6.0 nm; ash residue: <0.1 wt.%	10 g	Plastic vial	80
				100 g	Plastic bottle	450
				500 g	Plastic jar	1800
11	RT-HPHT-L Code: 133	Crashed High Pressure High Temperature nanodiamond powder, purified, hydroxylated; for polishing slurries, pastes & pads	Hydrophilic, lyophobic; average grain size: 40-50 nm; ash residue: <0.1 wt.%	10 g	Plastic vial	80
				100 g	Plastic bottle	350
				500 g	Plastic jar	1400
12	RT-HPHT-AL Code: 134	Crashed High Pressure High Temperature nanodiamond powder, purified, modified, hydroxylated & nitrogenized, for plating	Hydrophilic, lyophilic; high PL; average grain size: 40-50 nm; ash residue: <0.1 wt.%	10 g	Plastic vial	80
				100 g	Plastic bottle	400
				500 g	Plastic jar	1600
14	RT-CNT Code: 141	Carbon nanotubes hydroxylated; for water soluble polymer resins & other composite materials	Hydrophilic, lyophobic; Nanopowder contains 100 % CNT 75 % of which single wall	10 g	Plastic vial	100
				100 g	Plastic bottle	750
				500 g	Plastic jar	3000

RAY offers also customization of carbon nanopowders, nanodiamonds, CNT and graphene, process development for their disaggregation and dispersing in a specific solvent or polymer resin.

Carbon Nanofluids

#	Product	Description	Reference	Volume	Packing	Price, \$
15	RayND-SP Code: 201	1 wt. % nanodiamond water-based colloid (carboxylated RayND), pH: 3.5-4.5; for CVD seeding & biomed applications	Disaggregated nanodiamonds dispersed in TDW, stable; average grain size: 4.0-4.5 nm	50 ml	Glass vial	80
				200 ml	4 glass vials	150
				1 L	Plastic bottle	600
16	RayND-W-4 Code: 202	4 wt. % nanodiamond water-based colloid (aminated & hydroxylated RayND), pH: 3.5-4.5; for biomed applications	TDW based nanofluid; highly dispersed & stable; high PL ; average grain size: 4.0-4.5 nm	50 ml	Glass vial	80
				200 ml	4 glass vials	250
				1 L	Plastic bottle	1000
17	RayND-S-2 Code: 203	2 wt.% nanodiamond saline-based colloid (carboxylated RayND); for biomedical applications	Highly dispersed & stable; average grain size: 4.0-4.5 nm	50 ml	Glass vial	80
				200 ml	4 glass vials	250
				1 L	Plastic bottle	1000
18	Ray-DMSO-5 Code: 204	5 wt. % nanodiamond dimethyl sulfoxide colloid (aminated RayND) , for cosmetics, biomed R&D, CVD seeding, fuel cells	Highly dispersed & stable; average grain size: 4.0-4.5 nm; high PL	50 ml	Glass vial	80
				200 ml	4 glass vials	300
				1 L	Plastic bottle	1200
19	RT-Ac-4 Code: 214	4 wt. % nanodiamond, acetone colloid, additive to plastic stabilizers, bisphenol A, acetone-soluble paints, varnishes & glues	Highly dispersed & stable; average grain size: 3.5-6.0 nm; high PL	50 ml	2 glass vials	80
				200 ml	8 glass vials	105
				1 L	40 glass vials	420
20	RT-NMP-5 Code: 216	5 wt. % nanodiamond N-methyl-2-pyrrolidone colloid; additive to compatible polymer resins, inks, textiles, sensors, etc.	Highly dispersed & stable; average grain size: 3.5-6.0 nm; high PL	50 ml	2 glass vials	80
				200 ml	8 glass vials	125
				1 liter	40 glass vials	500
21	RT-T-7 Code: 217	7 wt. % nanodiamond toluene colloid; for paints, lacquers, adhesives, rubbers, fuels, explosives	Highly dispersed & stable; average grain size: 3.5-6.0 nm; high PL	50 ml	2 glass vials	80
				200 ml	8 glass vials	190
				1 L	40 glass vials	760
22	RT-ETA-5 Code: 218	5 wt.% nanodiamond ethanolamine colloid; additive to detergents, emulsifiers, polishes, corrosion inhibitors, CO ₂ scrubbers, etc.	Highly dispersed & stable; average grain size: 3.5-6.0 nm; high PL	50 ml	2 glass vials	80
				200 ml	8 glass vials	150
				1 L	40 glass vials	580
23	RT-Xy-7 Code: 219	7 wt. % nanodiamond xylene colloid; for PET products, inks, rubbers, glues, paints, for wafers & PCB cleaning agents	Highly dispersed & stable; average grain size: 3.5-6.0 nm; high PL	50 ml	2 glass vials	80
				200 ml	8 glass vials	200
				1 L	40 glass vials	780
24	RT-Cy-7 Code: 220	7 wt. % nanodiamond cyclohexane colloid, additive to anionic elastomers, CPL & nylon	Highly dispersed & stable; average grain size: 3.5-6.0 nm; high PL	50 ml	2 glass vials	80
				200 ml	8 glass vials	200
				1 L	40 glass vials	780
25	RT-DMF-7 Code: 221	7 wt. % nanodiamond dimethylformamide colloid, for acrylic fibers, plastics, synthetic leathers, glues & other composites	Highly dispersed & stable; average grain size: 3.5-6.0 nm; high PL	50 ml	2 glass vials	80
				200 ml	8 glass vials	200
				1 L	40 glass vials	780
26	RT-PGMEA-3 Code: 225	3 wt. % nanodiamond 1-methoxy-2-propanol acetate colloid; additive to inks, coatings & cleaners, including silicon wafers	Highly dispersed & stable; average grain size: 3.5-6.0 nm; high PL	50 ml	2 glass vials	80
				200 ml	8 glass vials	150
				1 L	40 glass vials	480
27	RT-D50-W5 Code: 231	5 wt.% nanodiamond water colloid (hydroxylated HPHT-ND); for lapping, cooling, inner surfaces flow polishing, electroplating	Average grain size: 40-50 nm. Sonication before handling is recommended	100 ml	Glass vial	80
				1 L	Plastic bottle	250
				5 L	HDPE jerrican	1200
28	RT-D50-W3A Code: 232	3 wt.% nanodiamond water colloid (aminated HPHT-ND); for coatings, polishing, lapping	Highly dispersed & stable; average grain size: 40-50 nm; high PL	100 ml	Plastic bottle	80
				1 l	Plastic bottle	300
				5 liter	HDPE jerrican	1500
29	RT-CNT-1 Code: 251	1 wt.% carbon nanotubes water-based colloid, for water soluble polymers & other composite materials	Highly dispersed & stable; Nanofluid contains CNT, 75 wt.% of which single wall CNT	100 ml	Plastic bottle	100
				1 L	Plastic bottle	500
				5 L	HDPE jerrican	2000

All nanofluids are prepared without surfactants.

RAY offers also customized carbon nanofluids with high sedimentation stability containing diamond, CNT, graphene and fullerene nanoparticles disaggregated and dispersed in various solvents.

Nanodiamond Additives for Industry

#	Product	Description	Reference	Weight	Packing	Price, \$
30	RT-DND-SP Code: 211	1 wt.% nanodiamond aqueous sol; additive to inks, polishing slurries, electrolytes, coolants, water soluble polymer resins, etc.	Fully disaggregated carboxylated nanodiamonds dispersed in TDW, stable	200 ml	Plastic bottle	100
				1 L	Plastic bottle	400
				5 L	HDPE jerrican	1600
31	RT-W-20 Code: 212	20 wt.% nanodiamond aqua-gel; additive to water-soluble greases, solutions for ultrasonic cleaning & PVD pretreatment	Carboxylated nanodiamonds dispersed in TDW; optimal dilution should be determined	1 L	Plastic bottle	1000
				5 L	HDPE jerrican	4000
				25 L	5 HDPE jers	16000
32	RT-W-3A Code: 213	3 wt. % nanodiamond aqueous sol; additive to water-soluble resins, polishing slurries, inks, coolants, sensors, etc.	Hydroxylated & aminated nanodiamonds dispersed in TDW; high stability; high PL	1 L	Plastic bottle	400
				5 L	HDPE jerrican	1600
				25 L	5 HDPE jers	6400
33	RT-Be-5 Code: 223	5 wt. % nanodiamond 2-Butoxyethanol colloid; additive to inks, paints, varnishes, herbicides, enamels, defoamers, glues, etc.	Highly dispersed & stable; average grain size: 3.5-6.0 nm; high PL	1 L	Plastic bottle	300
				5 L	HDPE jerrican	1200
				25 L	5 HDPE jers	4800
34	Ray-IPA-5 Code: 205	5 wt. % nanodiamond isopropyl alcohol colloid (RayND), highly dispersed, for seeding in CVD diamond growth	Highly dispersed & stable; average grain size: 4.0-4.5 nm; high PL	200 ml	8 glass vials	300
				1 L	40 glass vials	1200
				5 L	200 gl. vials	4800
35	RT-Lub Code: 312	4 wt.% nanodiamond additive to synthetic oils; recommended dilution: finishing: 1/60, running-in: 1/100, motor oils: 1/125	Based on PAO6; highly dispersed & stable; average grain size: 3.5-6.0 nm	1 L	Plastic bottle	665
				5 liters	HDPE jerrican	2500
				25 liters	5 HDPE jers	12000
36	RT-Lap Code: 313	10 wt. % nanodiamond organic-based grease for fine polishing of diamonds, CVD diamond films, optic crystals & ceramics	Alkanolamine-based; average grain size: 3.5-6.0 nm; washed of with aglycerol + water	50 ml	Plastic jar	80
				1 L	Plastic jar	500
				6 L	6 plastic jars	1800
37	RT-Lap-A Code: 314	5 wt. % nanodiamond antiwear grease for lapping, finishing, running-in of gears, engines, generators and precision parts	Polyol-based, stable; average grain size: 3.5-6.0 nm; washed off with water	50 ml	Plastic jar	80
				1 L	Plastic jar	300
				6 l	6 plastic jars	960
38	ND-Galvano Code: 317	20 wt.% nanodiamond water-based gel, additive to electrolytes in galvanic coatings for improving wear & corrosion resistance	Water-based; Recommended dilution 1/40, or 5-6 g nanodiamonds in electrolyte	1 L	Plastic bottle	650
				5 L	HDPE jerrican	3000
				25 L	5 HDPE jers	12000
39	ND-Depo Code: 319	Nanodiamond additive to electrolytes for galvanic & electroless coatings improving wear & corrosion resistance of coatings	Functionalized powder; recommended ratio 5-6 g in 1 liter electrolyte	500 g	Plastic jar	1400
				4 kg	8 plastic jars	10000
				10 kg	2 plst baskets	22000
40	ND-EP Code: 411	Nanodiamond powder, additive to EP502 & other compatible epoxy resins	Ratio should be defined by the customer for each application (recommended 0.02 -0.3 wt.%)	500 g	Plastic jar	1500
				4 kg	8 plastic jars	11000
				10 kg	2 plst baskets	22000

RAY provides also ready-to-use customized additives to polymers: silicone resins, elastomers & plastics in the form of master-batch, nanofluid or modified nanopowders, which can be easily mixed with a basic material & don't require additional equipment to be applied in existing industrial processes.

Dear Sirs,

This product catalog is valid by the end June 2024. The prices do not include delivery, currency exchange and insurance expenses. In case of quote request or ordering, please fill the contact form here: <https://nanodiamond.co.il/all-products/> and we will answer you shortly. Please feel free to contact for more information about our goods & the terms of their delivery. We are always at your service.

Ray Techniques' Team
info@nanodiamond.co.il