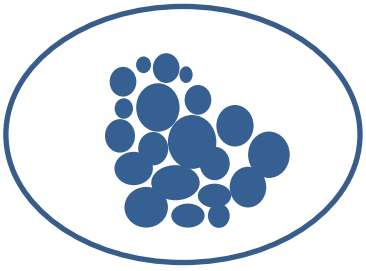
NANO POWDERS

- Nano Powders ..... I-IV 02
- Nano Powders List ..... I-IV 03



Nano Powders

Nanomaterials are substances in a metastable state, with large specific surface area, small particle size, high proportion of surface atoms, unique electronic motion states and surface effects, and exhibit macroscopic quantum tunneling effects and quantum size effects. These structural characteristics make Nanomaterials have many excellent properties.

CERTIFICATE

Each batch of material is shipped with a certificate of analysis and represents the current batch only.

Material Safety Data Sheet (MSDS) will be attached if the materials are dangerous.

PHYSICAL PROPERTIES

1). Small size effect.

2). Surface effect.

3). Quantum size effect.

4). Macroscopic quantum tunneling.

CUSTOM MANUFACTURING

Funcmater provide custom service if there is no dimensions or purity you want on the list, Don't hesitate to contact us.



Nano Powders

Nanomaterials are materials that have at least one dimension of nanometer size (1-100 nm) in three-dimensional space or are composed of them as basic units, and are widely used in biomedical, optical and electronic fields.

Pure Metal Powder

Product Name	Formula	Purity (%)	Particle Size (nm)	BET (m2/g)	Volume Density (g/cm3)	Form	Color
Aluminum Powder	Al	>99.0	50	20	0.23	spherical	Black
Bismuth Powder	Bi	>99.0	40	39.6	0.9	spherical	Black
Chromium Powder	Cr	>99.0	60	24.8	1.03	spherical	Black
Cobalt Powder	Co	>99.0	30	40.3	0.19	spherical	Black
Copper Powder	Cu	>99.0	60	18	0.3	spherical	Black-Brown
Indium Powder	In	99	80	16.8	1.19	square	Black
Iron Powder	Fe	>99.0	50	20	2.3	spherical	Black
Molybdenum Powder	Mo	>99.0	40	16	1.2	spherical	Black
Nickel Powder	Ni	>99.0	50	23.2	0.22	spherical	Black
Silicon Powder	Si	>99.0	30	42.4	0.19	spherical	Yellow
Silver Powder	Ag	>99.0	20	42	0.5	spherical	Ash Black
Tantalum Powder	Ta	99	60	24.4	1.05	spherical	Black
Tin Powder	Sn	>99.0	50	45.3	0.42	spherical	Black
Titanium Powder	Ti	>99.0	40	38.3	0.19	spherical	Black
Tungsten Powder	W	>99.0	50	12	2	spherical	Black
Zinc Powder	Zn	99	80	12.3	0.62	spherical	Black-Purple

Metal Alloy Powder

Product Name	Formula	Purity(%)	Particle Size (nm)	BET (m2/g)	Volume Density (g/cm3)	Form	Color
Aluminum Silicon Alloy Powder	AlSi	>99.0	80	8.14	0.24	spherical	Black
Copper Nickel Alloy Powder	CuNi	>99.0	55	12.3	0.15	spherical	Dark-Black
Copper Tin Alloy Powder	CuSn	>99.0	80	7.39	0.19	spherical	Black
Copper Zinc Alloy Powder	CuZn	>99.0	60	10.2	0.18	spherical	Black
Iron Nickel Alloy Powder	FeNi	>99.0	80	7.12	0.22	spherical	Black
Tin Bismuth Alloy Powder	SnBi	99	50	13.46	0.64	spherical	Black

Sulfide Powder

Product Name	Formula	Purity (%)	Particle Size (nm)	BET (m2/g)	Volume Density (g/cm3)	Form	Color
Molybdenum Disulfide Powder	MoS_2	99	50	35.46	0.912	subsphaeroidal	Black
Tungsten Sulfide Powder	WS_2	99	50	34.21	1.102	subsphaeroidal	Black

Silicide Powder

Product Name	Formula	Purity(%)	Particle Size (nm)	BET (m2/g)	Volume Density (g/cm3)	Form	Color
Hafnium Silicide Powder	$HfSi_2$	99	<1.0μm	12.47	5.12	Cubic	Black
Molybdenum Silicide Powder	$MoSi_2$	99	<1.0μm	24.24	4.21	Cubic	Black
Tantalum Silicide Powder	$TaSi_2$	99	50	36.23	5.16	Cubic	Grey Black
Zirconium Silicide Powder	$ZrSi_2$	99	<1.0μm	14.24	2.262	Square	Black

Oxide Powder

Product Name	Formula	Purity (%)	Particle Size (nm)	BET (m2/g)	Volume Density (g/cm3)	Form	Color
Aluminum Oxide Powder	Al_2O_3	99	10-20	85-65	0.25	γ	Black
Bismuth Oxide Powder	Bi_2O_3	99	50	8.6	0.65	spherical	Yellow
Cerium Oxide Powder	CeO_2	>99.0	30-60	22		subsphaeroidal	Off-White
Cobalt Oxide Powder	CoO	99	30	40	0.7	spherical	Black
Copper Oxide Powder	CuO	99	40	38	0.7	subsphaeroidal	Black
Copper Oxide Powder	CuO	99	100	20	1.2	subsphaeroidal	Black
Ferrosoferric oxide Powder	Fe_3O_4	99	50	32	0.77	spherical	Black
Hafnium Oxide Powder	HfO_2	99.5	100	20.43	1.28	subsphaeroidal	White
Indium Oxide Powder	In_2O_3	>99.9	50	15	1.304	Cubic, subsphaeroidal	Yellow
Indium Oxide-Tin Oxide Powder	ITO	99.99	30	82	0.6	subsphaeroidal	Yellow/Blue
Iron Oxide Powder	Fe_2O_3	99	30	41	0.69	α	Red
Iron Oxide Powder	Fe_2O_3	99	50	31	0.78	γ	Red-Brown
Magnesium Oxide Powder	MgO	99	50	30	0.8	subsphaeroidal	White
Molybdenum Dioxide Powder	MoO_2	>99.9	50	55	0.96	Cubic	Dark-Purple
Molybdenum Oxide Powder	MoO_3	>99.0	50	31	0.78	subsphaeroidal	Baby-Blue
Nickel Oxide Powder	NiO	99	50	32	0.76	spherical	Black
Niobium Oxide Powder	Nb_2O_5	99	100	19.84	1.34	Monoclinic	White
Silicon Oxide Powder	SiO_2	99	20	80	0.23	subsphaeroidal	White
Tantalum pentoxide Powder	Ta_2O_5	99	100	20.45	1.29	Monoclinic	White
Tin Oxide Powder	SnO_2	99.9	30	80	0.63	subsphaeroidal	Off-White
Tin Oxide-Antimony Oxide Powder	ATO	99.5	40	70	0.85	subsphaeroidal	Baby-Blue
Titanium Oxide Powder	TiO_2	99	20	65	0.45	Anatase	White
Titanium Oxide Powder	TiO_2	99	30	60	0.55	Rutile	White
Tungsten Oxide Powder	WO_3	99.95	50-300	2.8-15	1.645	subsphaeroidal	Yellow
Yttrium Oxide Powder	Y_2O_3	>99.0	30-50, 50-80				
Zinc Oxide Powder	ZnO	99	30	63	0.58	subsphaeroidal	White
Zirconium Oxide Powder	ZrO_2	99	40	40	0.71	Monoclinic	White
Zirconium Oxide Powder	ZrO_2	99	50	38	0.78	3γ square	White
Zirconium Oxide Powder	ZrO_2	99	50	38	0.78	5γ square	White
Zirconium Oxide Powder	ZrO_2	99	50	37	0.8	8γ square	White

Carbide Powder

Product Name	Formula	Purity (%)	Particle Size (nm)	BET (m2/g)	Volume Density (g/cm3)	Form	Color
Boron Carbide Powder	B_4C	>99.0	60	39	1	Hexagonal	Black
Boron Carbide Powder	B_4C	>99.0	700	5.2	1.49	Hexagonal	Black
Chromium Carbide Powder	Cr_3C_2	>99.0	100	30.2	2.14	Monoclinic	Black
Chromium Carbide Powder	Cr_3C_2	>99.0	600	12.3	3.12	Monoclinic	Greyish-green
Hafnium Carbide Powder	HfC	>99.0	800	8.3	4.2	Cubic	Ash Black
Molybdenum Carbide Powder	Mo_2C	>99.0	100	31.9	3.41	Hexagonal	Ash Black
Molybdenum Carbide Powder	Mo_2C	>99.2	800	8.24	4.17	Hexagonal	Dark Gray
Niobium Carbide Powder	NbC	>99.0	100	31.7	3.49	Hexagonal	Black Brown
Niobium Carbide Powder	NbC	>99.0	800	8.18	4.8	Hexagonal	Grey Brown
Silicon Carbide Powder	SiC	>99.0	40	39.8	0.11	Cubic	Greyish-green
Silicon Carbide Powder	SiC	>99.0	600~800	3.2	1.52	Cubic	Greyish-green
Tantalum Carbide Powder	TaC	>99.0	100	32.8	3.1	Cubic	Brownish Black
Tantalum Carbide Powder	TaC	>99.0	800	8.38	4.1	Cubic	Brown
Titanium Carbide Powder	TiC	>99.0	50	38.7	0.12	Cubic	Black
Tungsten Carbide Powder	WC	>99.0	60	40	1.12	Hexagonal	Black
Vanadium Carbide Powder	VC	>99.0	80	30.1	2.14	Cubic	Black
Vanadium Carbide Powder	VC	>99.0	700	8.3	2.8	Cubic	Black
Zirconium Carbide Powder	ZrC	>99.0	50	30.2	0.07	Cubic	Black
Zirconium Carbide Powder	ZrC	>99.0	200	9.5	1.19	Cubic	Black



Nitride Powder

Product Name	Formula	Purity (%)	Particle Size (nm)	BET (m2/g)	Volume Density (g/cm3)	Form	Color
Aluminum Nitride Powder	AlN	>99.0	50	42	0.15	Hexagonal	White
Aluminum Nitride Powder	AlN	>99.0	500	12.9	1.15	Hexagonal	Offwhite
Boron Nitride Powder	BN	>99.0	50	43.6	0.11	Hexagonal	White
Boron Nitride Powder	BN	>99.0	600	9.16	2.3	Hexagonal	White
Chromium Nitride Powder	CrN	>99.0	100	33.2	3.19	Cubic	Grey Black
Chromium Nitride Powder	CrN	>99.1	800	9.23	4.6	Cubic	Grey Brown
Silicon Nitride Powder	Si_3N_4	>99.0	10	59.6	0.09		White
Sub micron Silicon Nitride Powder	Si_3N_4	>99.0	800	10.3	1.16	Cubic	Offwhite
High purity Silicon Nitride Powder	Si_3N_4	>99.9	1000	9.8	1.2	Cubic	Offwhite
Titanium Nitride Powder	TiN	>99.0	20	60.2	0.12	Cubic	Black
Sub micron Titanium Nitride Powder	TiN	>99.0	700	10	2.3	Cubic	Pale Yellow
N RICH Titanium Nitride Powder	TiN	>99.0	700	10.6	2.3	Cubic	Yellow
Titanium Oxynitride Powder	TiON	>99.0	30	60.13	0.06	subsphaeroidal	White
Vanadium Nitride Powder	VN	>99.0	40	30.2	1.29	Cubic	Black
Zirconium Nitride Powder	ZrN	>99.0	800	9.16	4.78	Cubic	Pale Yellow

Boride Powder

Product Name	Formula	Purity (%)	Particle Size (nm)	BET (m2/g)	Volume Density (g/cm3)	Form	Color
Boron Powder	B	>99.0	50-80	35.46	0.09	Amorphous form	Black Brown
Hafnium Boride Powder	HfB_2	>99.0	50	40.23	0.16	Hexagonal	Black
Lanthanum Hexaborid Powder	LaB_6	>99.0	50	48.16	0.09	Hexagonal	Black Purple
Titanium Boride Powder	TiB_2	>99.0	50	45.16	0.09	Hexagonal	Black
Zirconium Boride Powder	ZrB_2	99	40	48.56	0.08	Hexagonal	Black