

# 5N/6N High Purity Aluminum Oxide

CAS#: 1344-28-1

M.W: 101.96

## Specification:

Type	Apperance	Phase	Particle Size	Purity (%)	Specific Surface Area (m2/g)	Character and Application
<b>6N High Purity Aluminum Oxide</b>						
SN-300N	White powder	$\alpha$ phase	1-20 um	99.9999	5-15	Laser Crystal
SN-200N	White powder	$\alpha$ phase	0.2-5 um	99.9999	5-15	PTFE Additive
<b>5N High Purity Aluminum Oxide</b>						
FN-100G	White powder	$\alpha$ phase	0.3-10 um	99.999	5-15	Sapphire crystal
FN-500G	White powder	$\alpha$ phase	500nm	99.999	5-15	Coating of Lithium battery diaphragm
FN-20GY	White powder	$\gamma$ phase	10-20nm	99.999	100-160	Military project, Ceramics
FN-30G	White powder	Hybrid	30-50nm	99.999	20-40	Ceramics, Paint

# 4N Nano Aluminum Oxide

CAS#: 1344-28-1

M.W: 101.96

## Specification:

Type	Apperance	Phase	Particle Size (nm)	Purity (%)	Specific Surface Area (m2/g)	Character and Application
<b>4N High Purity Nano Aluminum Oxide (<math>\alpha</math> phase)</b>						
4N-30	White powder	Hybrid	30nm	99.99	20-40	Ceramic, Target materials, Refractory materials
4N-100	White powder	$\alpha$ phase	100nm	99.99	5-15	Ceramic, Coating
4N-200	White powder	$\alpha$ phase	200nm	99.99	5-15	Ceramic, Plastic, Rubber
4N-300	White powder	$\alpha$ phase	300nm	99.99	5-10	Ceramic, Plastic, Rubber
4N-500	White powder	$\alpha$ phase	500nm	99.99	5-10	Coating of battery diaphragm
<b>Nano Aluminum Oxide for polishing</b>						
4N-05P	White powder	$\alpha$ phase	50nm	99.99	20-40	Precision Polishing
4N-10P	White powder	$\alpha$ phase	100nm	99.99	10-30	Precision Polishing
4N-20P	White powder	$\alpha$ phase	200nm	99.99	5-15	Precision Polishing
4N-30P	White powder	$\alpha$ phase	300nm	99.99	5-10	Polishing for metal, precious stone
4N-50P	White powder	$\alpha$ phase	500nm	99.99	5-10	Polishing for meter, precious stone
3N-33P	White powder	$\alpha$ phase	1-2 um	99.9	5-10	Polishing for metal

# 4N Nano Aluminum Oxide

CAS#: 1344-28-1

M.W: 101.96

## Specification:

Type	Apperance	Phase	Particle Size (nm)	Purity (%)	Specific Surface Area (m2/g)	Character and Application
<b>4N High Purity Nano Aluminum Oxide (<math>\gamma</math> phase)</b>						
4N-R20Y	White powder	$\gamma$ phase	10-20nm	99.99	120-160	Catalyst carrier
4N-R20M	White powder	$\gamma$ phase	10-20nm	99.99	110-150	Anticaking agent for powder coating
4N-R30D	White powder	$\gamma$ phase	10-30nm	99.99	100-160	Anode material of Lithium Battery
4N-R50Y	White powder	$\gamma$ phase	50nm	99.99	100-150	Catalyst carrier
<b>4N Nano grade Aluminum Hydroxide</b>						
4N-AH20	White powder	/	10-20nm	99.99	200-300	Catalyst carrier
4N-AH30D	White powder	/	30nm	99.99	200-300	Anode material of Lithium Battery
4N-AH50	White powder	/	50nm	99.99	150-200	Fire retardant carrier, Catalyst carrier
4N-AH100	White powder	/	100nm	99.9	10-20	Fire retardant
<b>Nano Aluminum Oxide for Heat Conduction</b>						
4N-04R	White powder	$\alpha$ phase	500nm	99.9	5-10	Heat conduction for Rubber and Plastic
3N-600D	White powder	$\alpha$ phase	1-5um	99.9	6-10	Heat conduction for Rubber and Plastic

# Nano Titanium Dioxide Series

**Specification:**

Type	Apperance	Purity (%)	Particle Size	Specific Surface Area	Type & Surface property	Character and Application
<b>High activity Nano Titanium Dioxide</b>						
BR-05	White powder	99.9	5nm	150-300	Anatase, Super-hydrophilicity	High catalytic activity. Deodorization and formaldehyde removal
<b>4N High Purity Titanium Dioxide</b>						
4N-T01	White powder	99.99	100-500nm	10-30	Rutile	Crystal growth, Electronic materials
<b>Nano Titanium Dioxide Rutile Grade</b>						
BR-T15	White powder	99.9	15nm	20-50	Rutile	For electronic materials, bettery, new energe, military project, target materials, ceramic...
BR-T25	White powder	99.9	30nm	20-50	Rutile	
BR-T60	White powder	99.9	60nm	20-50	Rutile	
BR-T200	White powder	99.5	200nm	5-15	Rutile	High whiteness, High tinting strength. Used for paint, printing ink, plastic and rubber...
BR-T200S	White powder	85-95	200nm	5-15	Oleophylic	
BR-T200H	White powder	85-95	200nm	5-15	Hydrophilic	
BR-T25F	White powder	88-90	25nm	60-100	Hydrophilic	Textile sizing, replace PVA, abrasion resistant
BR-T25S	White powder	85-95	30nm	20-40	Oleophylic	Paint, printing ink, plastic, rubber

Packing: 20kgs each fiber drum

## Nano Titanium Dioxide Series

Type	Apperance	Purity (%)	Particle Size	Specific Surface Area	Type & Surface property	Character and Application
<b>Nano Titanium Dioxide Anatase Grade</b>						
BA-T15	White powder	99.9	15nm	60-120	Anatase	Good photocatalytic activity, can be used for self-cleaning, antibacterial, catalysator
BA-T18	White powder	99.9	20nm	60-120	Anatase	
BA-T60	White powder	99.9	60nm	50-90	Anatase	
BA-T200	White powder	99.5	200nm	5-15	Anatase	High whiteness, High tinting strength. Used for paint, electronic materials...
BA-T18H	White powder	90-94	20nm	60-120	Hydrophilic	Photocatalysis, water base
BA-T18S	White powder	85-90	20nm	60-120	Oleophylic	Photocatalysis, oil base
H-J25	White powder	99.9	20nm	60-90	Hybrid	Photocatalysis

<b>Nano Titanium Dioxide for different application</b>						
Type	Apperance	Purity (%)	Particle Size	Specific Surface Area (m <sup>2</sup> /g)	Type & Surface property	Character and Application
BR-T30D For bettery	White powder	99.9	30nm	20-50	Rutile	Mixed anode materials. To improve the electrochemical stability and cycle performance of the battery
BA-T30D For bettery	White powder	99.9	20nm	60-120	Anatase	Mixed anode materials and synthesis of lithium titanate. To improve the capacitance and cyclicity of lithium titanate
BR-T02H For cosmetic	White powder	89-95	30nm	40-70	Rutile, Silicon coated, Hydrophilic	Anti-UV, Good dispersion
BR-T02SG For cosmetic	White powder	82-88	30nm	40-60	Rutile, Silicon coated, Silicone Oil, Oleophylic	Anti-UV, Good dispersion
BR-T25H For cosmetic	White powder	83-88	30nm	40-70	Rutile, Si and Al coated, Hydrophilic	Anti-UV, Good dispersion
BR-T25SY For cosmetic	White powder	80-85	30nm	40-60	Rutile, Si, Al and stearic acid coated, Oleophylic	Anti-UV, Good dispersion
BR-T25SG For cosmetic	White powder	80-85	30nm	40-60	Rutile, Si, Al and Silicone Oil coated, Oleophylic	Anti-UV, Good dispersion
BR-T25Q Car paint	White powder	99	30nm	50-80	Rutile, Al and Zr coated	Good dispersion, for car paint
BR-T06H For paint	White powder	88-90	30nm	40-70	Rutile, Hydrophilic	Good dispersion, for water base paint
BR-T06S For paint	White powder	88-92	30nm	40-60	Rutile, Oleophylic	Good dispersion, for solvent base paint
BR-TG01	White powder	99.9	10nm	70-120	Anatase	For Diatom mud coating, Catalyst coating

# Nano Zirconium Dioxide

## Specification:

Type	Apperance	Crystalline phase	Particle Size	ZrO2 (%)	Y2O3 (%)	Specific Surface Area (m2/g)	Character and Application
BZ-R10	White powder	Monoclinic	10nm	99.9	0	40-70	Catalyator
BZ-R30	White powder	Monoclinic	30nm	99.9	0	20-40	Ceramic, Paint, Refractory materials
BZ-R50	White powder	Monoclinic	50nm	99.9	0	10-30	Ceramic, Paint, Refractory materials
BZ-R30Y3	White powder	Tetragonal	30nm	94.7	3mol	20-40	Structural ceramics, Refractory materials
BZ-R50Y3	White powder	Tetragonal	50nm	94.7	3mol	20-40	Structural ceramics, Refractory materials
BZ-R30Y5	White powder	Tetragonal	30nm	91.5	5mol	20-40	Structural ceramics, Functional ceramics, Oxygen sensor
BZ-R50Y5	White powder	Tetragonal	50nm	91.5	5mol	20-40	Structural ceramics, Functional ceramics, Oxygen sensor
BZ-R30Y8	White powder	Cubic	30nm	86.5	8mol	20-50	Oxygen sensor, fuel cell
BZ-R80Y3R	White granular	Tetragonal	50-100nm	94.7	3mol	/	Granulation, Dental ceramics
BZ-R200F	White powder	Monoclinic	0.2um	99.9	0	5-15	Polishing
BZ-R30D	White powder	Monoclinic	30nm	99.9	0	10-35	Materials for bettery

## Product character:

1. Fine particle size and small agglomeration
2. Uniform particle size
3. High sintering activity and high sintering density

# Nano Silicon Dioxide

**CAS#:** 14808-60-7

**M.W:** 60.08

**Specification:**

Type	Apperance	Particle Size	Purity (%)	Specific Surface Area (m2/g)	PH	Character and Application
BS-SP15	White powder	15nm	99.8	250+/-30	4-7	Large specific surface area, High transparency
BS-SP20	White powder	20nm	99.5	220+/-30	7-8	Porous, Good thickening effect and abrasion resistance for paint
BS-SP30	White powder	30nm	99.5	220+/-30	7-8	Good dispersion and abrasion resistance for paint
BS-SP50	White powder	50nm	99.5	200+/-30	7-8	Good dispersion and abrasion resistance for paint
BS-SP30S	White powder	30nm	99.5	150-300	/	Oleophylic, used for paint, plastic, printing ink
BS-SP30H	White powder	30nm	99.5	150-300	7-8	Hydrophilic. Good dispersion in water. Used for paint, latex, paper
BS-SP30G	White powder	30nm	99.5	150-300	/	Hydrophobic. Used for paint, plastic, printing ink
BS-SP30F	White powder	30nm	99.5	150-300	7-8	Good dispersion, High activity. Good for sizing

**Packing:** 10kgs each bag

**Dosage:** 0.5-5%



# Nano Magnesium Oxide / Magnesium Hydroxide

CAS#: 14808-60-7

M.W: 60.08

## Specification:

Type	Apperance	Particle Size	Purity (%)	Specific Surface Area (m2/g)	Character and Application
BM-30	White powder	30-50nm	99.9	10-30	Ceramic, plastic/rubber, Paint, Textile additives
BM-30D	White powder	30-50nm	99.9	10-35	Mixed lithium bettery materials. To improve cycle performance.
BM-50	White powder	50-80nm	99.9	10-20	Ceramic, plastic/rubber, Paint, Textile additives
BM-100	White powder	100-150nm	99.9	10-20	Ceramic, plastic/rubber, Paint, Textile additives
BMH-01D	White powder	30-50nm	99.9	10-20	Magnesium hydroxide battery material additive
BMH-T01	White powder	30-50nm	99.9	10-20	Fire-retardant

Packing: 20kgs each bag

Dosage: 0.5-10%

# Nano Ag ion for Anti-Bacterial

## Specification:

Type	Apperance	Main content	Ag (%)	Particle Size	Character and Application
AG-T07	White powder	Nano TiO <sub>2</sub> with Ag ion exchanger	2.0+/-0.2	30nm	Anti bacterial for textile and plastic
AG-T07P	White powder	Nano inorganic materials and Ag ion complexes	2.0+/-0.2	30nm	Anti bacterial for paint
AG-T08	White powder	Nano inorganic materials and Ag ion complexes	3.0+/-0.2	30nm	Anti bacterial for textile
AG-T07L	White emulsion	Nano inorganic materials and Ag ion complexes	Solid 20%	30nm	Anti bacterial for textile
AG-TA33	Translucent liquid	Nano TiO <sub>2</sub> with Ag ion exchanger	1000ppm	10nm	Deodorization. Ant bacterial for textile
AG-T07LT	White emulsion	Nano TiO <sub>2</sub> with Ag ion exchanger	Solid 20%	30nm	Anti bacterial for paint

## Character:

1. Nano antibacterial agent not only has the antibacterial effect of nano titanium dioxide under ultraviolet light, but also has the antibacterial effect of nano silver without light source.
2. Nano antibacterial agent particles are uniform
3. Nano antibacterial agent is nonvolatile, insoluble and does not pollute the environment

## Application:

1. All kinds of plastics, refrigerators, washing machines, televisions, cameras, telephones, keyboards, power switches and household appliances
2. Various building materials: cement, paint, paint, wallpaper, decorative materials
3. All kinds of chemical fiber, clothing materials, shoes, socks, gloves, towels, etc
4. Paper Products
5. All kinds of toys, stationery, daily necessities, packaging

**Dosage: 0.5-2%**

**Packing: 15kgs each fiber drum**

# Nano Zinc Oxide

**CAS#:** 1314-13-2

**M.W:** 81.37

**Specification:**

Type	Apperance	Particle Size	Purity (%)	Specific Surface Area (m2/g)	Solvent	Character and Application
ZN-JH05	White powder	15nm	99.9	30-50	/	Catalyzator, Formaldehyde removal
ZN-J30	Pale yellow powder	30nm	99.9	20-50	/	Anti bacterial, Anti-UV, for textile, paint, rubber, plastic
ZN-J50	White powder	50nm	99.9	10-35	/	Anti bacterial, Anti-UV, for textile, paint, rubber, plastic
ZN-J90	White powder	90nm	99.9	10-30	/	Anti bacterial, Anti-UV, for textile, paint, rubber, plastic
ZN-J30H	Pale yellow powder	30nm	92-95	20-50	/	Surface treated, Hydrophilic
ZN-J50H	White powder	50nm	92-95	20-35	/	Surface treated, Hydrophilic
ZN-J50L	White powder	30-50nm	99.9	15-30	/	Nano AZO, used for conductive material, antistatic material
ZN-J30W	Pale yellow emulsion	30nm	20-30	/	water	For textile, paint, rubber, printing ink...
ZN-J50W	White emulsion	50nm	20-30	/	water	
ZN-J30HW	Pale yellow emulsion	30nm	20-30	/	water	Surface treated, Good dispersion
ZN-J50A	White emulsion	50nm	20-30	/	Isooctyl palmitate	Surface treated, Good dispersion
ZN-J30C	Pale yellow emulsion	30nm	20-30	/	Alcohol	For textile, paint, rubber, printing ink...
ZN-J30M	Pale yellow emulsion	30nm	20-30	/	PMA	For coating, paint, printing ink...

**Dosage: 0.5-10%**

**Packing: 15kgs each fiber drum**

# Nano ATO

Content: SnO<sub>2</sub>: Sb<sub>2</sub>O<sub>3</sub>=90:10 or others

## Specification:

Type	Appearance	Particle Size	Purity (%)	Specific Surface Area (m <sup>2</sup> /g)	Solvent	Character and Application
ATO-G06	Blue powder	10-20nm	99.9	40-70	/	Resistivity reaches 10 <sup>6</sup> -10 <sup>8</sup> , Light color transparency, radiation resistance, antistatic, barrier radiation, heat insulation materials, etc.
ATO-G06C	Blue liquid	10-20nm	20-30	/	Alcohol	Resistivity reaches 10 <sup>6</sup> -10 <sup>8</sup> , Light color transparency, radiation resistance, antistatic, barrier radiation, heat insulation materials, etc.
ATO-G06W	Blue liquid	10-20nm	20-30	/	Water	Good stability, transparency and film forming
ATO-G06B	Blue liquid	10-20nm	20	/	Ketone	Stable dispersion, antistatic, good film-forming property. Resistivity reaches 10 <sup>6</sup> -10 <sup>8</sup>

## Character:

1. ATO has good electrical and optical properties. As an antistatic agent, it is widely used in coatings, chemical fibers, polymer films and other fields
2. ATO is better than other antistatic materials in terms of activity resistance, thermoplastic, wear resistance, dispersion and safety, such as graphite, surfactant, metal powder, etc. ATO has the characteristics of conductivity, light color transparency, weather resistance, radiation resistance and so on.

## Application:

It is mainly used in anti-static plastics, coatings, fibers, anti radiation coatings for displays, energy-saving windows for buildings, solar cells, automobile windshield, photoelectric display devices, transparent electrodes, catalysis, etc. In addition, it can also use its attenuation to microwave, which can be used in computer room, radar shielding protection area and other fields that need to shield electromagnetic waves

**Dosage: 1%-3%**

# Nano Rare earth

## Specification:

Type	Item name	Particle Size	Purity (%)	Specific Surface Area (m <sup>2</sup> /g)	Character and Application
RE-Ce01	Nano Cerium Oxide	30nm	99.99	30-60	Precision polishing, Catalyzator and others
RE-Ce02	Nano Cerium Oxide	50nm	99.99	20-50	Precision polishing, Rubber heat stabilizer, Ceramics
RE-Ce03	Nano Cerium Oxide	70nm	99.99	10-30	Precision polishing and others
RE-Ce04	Nano Cerium Oxide	200nm	99.99	5-10	Polishing and others
RE-Y01	Nano Yttrium Oxide		99.99	30-70	Catalyzator, Ceramics, Metal additives and others
RE-Y02	Nano Yttrium Oxide		99.99	10-20	Catalyzator, Ceramics, Metal additives and others
RE-La01	Nano Lanthanum Oxide		99.99	30-50	Catalyst, magnetoresistive material, piezoelectric material and others
RE-La02	Ultrafine lanthanum Oxide		99.99	1-10	Catalyst, magnetoresistive material, piezoelectric material and others

# Nano Rare earth

## Specification:

Product name	Appearance	Particle size	Purity (%)	Character and Application
Nano Tungsten Trioxide	Yellow powder	30-50nm	99.95	Gas sensing materials, petroleum catalysts
Nano Dysprosium Oxide	White or pale yellow powder	40-60nm	99.95	Magneto optical storage material
Nano Erbium Oxide	Pink powder	50-100nm	99.95	Yttrium iron garnet additive
Nano Gadolinium Oxide	White powder	40-60nm	99.95	Yttrium aluminum and yttrium iron garnet additives
Nano Holmium Oxide	Yellow powder	40-60nm	99.95	Catalyzator, Phosphors and laser materials
Nano Neodymium Oxide	Purple or blue powder	40-60nm	99.95	Nd-Fe-B permanent magnet material
Nano Praseodymium Oxide	Dark brown powder	40-60nm	99.95	Praseodymium yellow and permanent magnet
Nano Samarium Oxide	Pale yellow powder	40-60nm	99.95	Electronic components and ceramic capacitors
Nano Terbium Oxide	Tan powder	40-60nm	99.95	Magneto optic material
Nano Ytterbium Oxide	White or pale yellow powder	40-60nm	99.95	Catalyzator, Phosphors and laser materials

# Nano Ferric Oxide / Ferroferric Oxide

## Specification:

Type	Item name	Appearance	Particle Size	Purity (%)	Specific Surface Area	Character and Application
FE-E01	Nano Ferric Oxide	Red powder	20-30nm	99.9	90-150	Heat resistance and rust prevention
FE-E02	Nano Ferric Oxide	Yellow powder	30-40nm	99.9	50-80	Magnetic material and others
FE-EF01	Nano Ferroferric Oxide	Black powder	10-20nm	99.9	10-20	Magnetic material and others
FE-EF02	Nano Ferroferric Oxide	Black powder	50nm	99.9	5-15	Precision polishing and others
FE-E01W	Nano Ferric Oxide	Red liquid	20-30nm	20	/	Heat resistance and rust prevention
FE-E02W	Nano Ferric Oxide	Yellow liquid	30-40nm	20	/	Magnetic material and others
FE-EF01W	Nano Ferroferric Oxide	Black liquid	10-20nm	20	/	Heat resistance and rust prevention
FE-EF02W	Nano Ferroferric Oxide	Black liquid	50nm	20	/	Precision polishing and others