

Expression of Interest

We invite proposals from interested parties to carryout collaborative work using our products like Barium ferrite, Catalytic grade titania, Pearl pigment, Zinc titanate, Nano titania etc, to develop saleable products in the market.

For More Details : Dr.K.Johnson DGM (QM, R&D)

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Barium Ferrite

Description

Barium ferrite is the chemical compound with the formula $BaFe_{12}O_{19}$. Barium ferrite is a highly magnetic material, has a high packing density and it has found applications in magnetic card strips, speakers, and magnetic tapes.

Application

Barium ferrite is used in applications such as recording media, permanent magnets, and magnetic stripe cards (credit cards, hotel keys, ID cards). Due to the stability of the material, it is able to be greatly reduced in size, making the packing density much greater. In recent decades, barium ferrite has replaced acicular oxides; without any dopants, the acicular oxides produce very low coercivity values, making the material very magnetically soft, while barium ferrites higher coercivity levels make the material magnetically hard and thus a superior choice for recording material applications. Ferrite magnets are resistant to temperature change, corrosion and oxidation. Ferrites are also being explored for the application in electric vehicle in place of rare earth magnets. We are regularly supplying this material for **Vikram Sarabhai Space Centre (VSSC)** for their high end application

Chemical name

Barium ferrite - $BaFe_{12}O_{19}$

CAS Number: 12047-11-9

Sl No	Characteristics	Specification
1	Appearance	Black Powder
2	Purity	99%

Zinc Titanate

Description

Zinc titanate metal oxides have attracted considerable attention for use as sorbent for desulfurization of coal gas, electroceramic materials with interesting dielectric properties. .

Application

Zinc titanate can be used in many fields such as white pigment, catalytic sorbent for the desulfuration of hot coal gases photocatalytic materials, filters and dielectric resonators materials, catalyst in liquid phase organic transformations, dielectric and microwave resonators, gas sensors, selective ion sensors, semiconductor material, photocatalytic material and also in paints as conductive pigments

Chemical Name

Zinc titanate Zn_2TiO_4

CAS No -12036-69-0

SI No	Characteristics	Specification
1	Appearance	White powder
2	Phase purity	99.5%
	APS	< 10 μ m
	Zinc	51-58%
	Titanium	18-21%

Nano titanium dioxide

Description

Nano titanium dioxide is an ultra fine TiO_2 with variable surface area. TTPL manufacture different grades of nano titanium dioxide based on customer application.

Application

AjANTOX-NS1 UV resistant translucent material made up of high surface area ultrafine TiO_2 slurry with 5% TiO_2 dispersed in water recommended for antibacterial, air purification, sewage treatment, chemical industry, cosmetics, sunscreen, beauty and whitening agent. UV resistant Plastic, printing ink coatings etc. Photocatalyst, self cleaning glass, self cleaning ceramics, Coating for paper-making industry. Producing titanium, ferrotitanium alloy, carbide alloy etc. in the metallurgical industry and astronautics industry.

AJANTOX-NS2 UV resistant translucent material made up of high surface area ultrafine TiO_2 slurry with 2% TiO_2 dispersed in water recommended for antibacterial, air purification, sewage treatment, chemical industry, cosmetics, sunscreen, beauty and whitening agent. UV resistant Plastic, printing ink coatings etc. Photocatalyst, self cleaning glass, self cleaning ceramics, Coating for paper-making industry. Producing titanium, ferrotitanium alloy, carbide alloy etc. in the metallurgical industry and astronautics industry.

AjANTOX-N1 An ultrafine TiO_2 mixed crystal recommended for Photocatalyst, self cleaning glass, self cleaning ceramics, chemical fiber. UV resistant materials, plastic, printing ink coatings etc. Antibacterial, air purification, sewage treatment, chemical industry, Cosmetics, sunscreen cream, natural white moisture protection cream, beauty and whitening cream, morning and night cream, moistening refresher, vanishing cream, skin protecting cream, face washing milk, skin milk, powder make-up Coating for paper-making industry. Producing titanium, ferrotitanium alloy, carbide alloy etc. in the metallurgical industry and astronautics industry.

AjANTOX-N2 An ultrafine TiO_2 Anatase crystal recommended for Antibacterial materials, air purification, sewage treatment, chemical industry, Cosmetics, sunscreen cream, natural white moisture protection cream, beauty and whitening cream, morning and night cream, moistening refresher, vanishing cream, skin protecting cream, face washing milk, skin milk, powder make-up Coating for paper-making industry.

AjANTOX-N3 is an ultrafine amorphous nano TiO_2 powder (as well as available in slurry and paste forms) recommended for evaluation Antibacterial material, air purification, sewage treatment, chemical industry. Cosmetics, sunscreen cream, natural white moisture protection cream, beauty and whitening cream, morning and night cream, moistening refresher, vanishing cream, skin protecting cream, face washing milk, skin milk, powder make-up. Coating, printing

ink, plastics, foods packing material. Coating for paper-making industry: used for improving the impressionability and opacity of the paper and used for producing titanium, ferrotitanium alloy, carbide alloy etc. in the metallurgical industry and Astronautics industry.

Chemical Name

Nano Titanium dioxide

CAS No- 13463-67-7

Properties	NS1	NS2	N1	N2	N3
Titanium Dioxide Purity	99.5%	99.5%	99.7%	99.7%	99.5%
Crystal form	Anatase	Anatase	Anatase – 85% Rutile – 15%	Anatase	Anatase
K ₂ O	<100ppm	<100ppm	<100ppm	<100ppm	<100ppm
Na ₂ O	<100ppm	<100ppm	<100ppm	<100ppm	<100ppm
Fe	56ppm	56ppm	28ppm	28ppm	56ppm
pH	6-7	6-7	4 - 5	4 - 5	3 - 4
Particle size	-	-	25 - 30nm	10 - 15nm	5nm
Surface Area	320m ² /g	320m ² /g	40 - 60m ² /g	100-150 m ² /g	250m ² /g
Appearance	Translucent liquid	Translucent liquid	White powder	White Powder	White powder
Solvent	Water	Water	-	-	-