

Application Data



Zinc Sulfide - Precipitated

BSI's Assortment:

Uncoated:
1522

Surface Coated:
1521

Precipitated zinc sulfide is a white pigment which consists of pure zinc sulfide. It is manufactured from highly purified zinc salts and sodium sulfide solutions. During the precipitation process, all toxic and chromogenic heavy metals are reduced to the parts per million (PPM) level. During the manufacturing process, the precipitate

Zinc Sulfide is an inert white pigment which is practically insoluble in water, organic solvents and in weak acids and alkalis.

is filtered and calcined (at 700° C) which results in the narrow particle size distribution of approx. 0.3 microns.

Paints and Coatings:

Precipitated zinc sulfide displays a low binder requirement, good rheological and white pigmentation properties. It is economical and advantageous wherever organic or inorganic binders require high pigmentation in undercoats, primers and marking paints. It can be used in combination with titanium dioxide pigmented latex paints and plasters to improve rheology.

In latex paints it contributes to weather resistance and has long term biocidal action. It has been shown to be flocculation resistant, and flow promoting in a wide range of coating systems. It has a high stabilizing action to suppress flooding and floating when used in combination with colored pigments.

Plastics:

Zinc sulfide is widely used in plastics for the following properties. Low binder

requirements, excellent dispensability, neutral white, low agglomerate content and good optical properties. It may be used in systems such as thermoplastics and thermosets, reinforced fiber glass, flame retardant compounds, elastomers and dispersions and compounds.

Printing Inks:

Zinc sulfide contributes to color neutrality and because of it's low abrasiveness, will result in less wear on equipment, stencils and plates.

Other Applications:

Other applications include fluorescent compounds, paper coatings, lubricants, powder coatings, adhesives, putties and insulating and sealing compounds.

Basic Properties:

Characteristics	1521	1522
% ZnS	98.0	98.0
% ZnO	0.2	0.2
% BaSO4	1.0	1.0
% Volatiles	0.2	0.2
Ave. Particle Size	0.30	0.35
Oil Absorption	13.0	14.0
% thru 325 Mesh	99.999	99.99
Mohs Hardness	3.0	3.0
Refractive Index	2.37	2.37
Dispensability	Very Good	Satisfactory
Lightfastness	Good	Good

Because of the it's relatively low refractive index, as compared to TiO2, zinc sulfide has about 60 - 65% of the tinting strength and hiding power of rutile pigment and about 70 - 75% of anatase. The mohs hardness and it's round particle shape will almost eliminate metal abrasion during processing.

Information presented herein is believed to be accurate and reliable but is not intended to meet any specification and does not imply any guarantee or warranty by Brenntag Specialties, Inc. (BSI). For more information and assistance, contact Technical Services at 1-800-732-0562.

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