

Application Data



Barytes - Natural Barium Sulfate

BSI's Assortment:

High Brightness:

| | |
|------|-------|
| 1440 | 8.0 μ |
| 1465 | 3.5 μ |
| 1475 | 2.5 μ |
| 1485 | 1.5 μ |
| 1495 | 1.2 μ |

| | |
|-------------|--------|
| Exbar W 325 | 10.0 μ |
| Exbar W 400 | 8.0 μ |
| Exbar W 4 | 4.0 μ |
| Exbar W 2 | 2.0 μ |
| Exbar W 1 | 1.0 μ |

| | |
|-------|--------|
| 112-A | 11.0 μ |
| 104 | 6.5 μ |
| 106 | 3.0 μ |
| 110 | 1.0 μ |

Standard Grade:

| | |
|-----------|--------|
| Exbar 200 | 15.0 μ |
| Exbar 325 | 10.0 μ |
| Exbar 400 | 8.0 μ |
| Exbar 4 | 4.0 μ |

Barytes, or barite is one of the most abundant and widely distributed minerals throughout the world. It is a primary source of barium for the chemical industry as a filler and extender pigment as well as a primary component of well drilling muds. Additional properties which enhance it's desirability are it's low oil absorption, high density, low abrasiveness, chemical

Barytes is also known as barite, heavy spar, tiff and permanent white. It is a fine, heavy, odorless, tasteless, white powder.

inertness, heat resistance, light fastness, low solubility and it's low spectral absorbance over a broad spectral band.

Pigment Extender and Filler:

Barytes competes with calcium carbonate and clay for use as a pigment extender and filler. The high specific gravity, low spectral absorbance over a broad range of wavelengths and minimal rheological effects in most systems are some of the advantages of barytes over competitive products.

A major use of barytes is in the formulation of primers for industrial and automotive undercoats, which require a high filler concentration and fineness of particle. The low oil absorption permits high loadings with minimal effects on rheological properties. The high filling level results in a smooth and nonporous primer surface possessing good sanding properties and retaining the gloss of the topcoat.

Barytes are suitable for finish coats, offering good chemical resistance, a high degree of brightness and an acceptable level of gloss. The use of micronized barytes in topcoats has been shown to improve the flow properties, surface hardness and color stability of the pigmented surface coating.

For exterior and interior coatings, in both water or oil based, barytes imparts good weathering characteristics due to it's chemical resistance properties. The high refractive index allows it to function as a translucent white pigment in water based emulsions.

Other Applications:

Barytes is also used in the manufacture of high density flooring compositions which are resistant to abrasion due to high traffic conditions. When added to ceramic mixes, barytes has been found to lower the melting point of the glass melt.

Low micron grades of barytes have many applications as fillers for elastomeric compositions because of their rheological properties, low abrasiveness, and chemical resistance. Barytes generally has no effect on the storage stability or aging resistance of these elastomeric compositions.

General Properties:

| | |
|--------------------|--------------------|
| Appearance: | Dense White Powder |
| Specific Gravity: | 4.25 - 4.50 |
| Melting Point: | 1580°C |
| Mohs Hardness: | 3.0 |
| Refractive Index: | 1.637 |
| Crystal Structure: | Rhombic |
| Oil Absorption: | 6 - 16 |
| Dry Brightness: | 65 - 94 |

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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