



PRODUCT PROFILE
NºMSR-FRITANGO 05/2005

FRITANGO®

ANHYDROUS ULEXITE GLASS FORM
ANHYDROUS BORONTRICALCITE
 B_5O_9 NACA



CHARACTERISTICS

FORMULA	B_5O_9 NACA
MOLECULAR WEIGHT	261.12
PURITY LIKE B ELEMENT	15.5 % MIN.
PURITY LIKE B_5O_9 NACA	75.0 % MIN.

GENERAL DESCRIPTION

FRITANGO® is a glass form compound of Anhydrous Ulexite. It is a good source of Boron with 50% of B_2O_3 at a low cost.

The product is not soluble in water, and obtained by fusion and subsequent cool down of melted controlled raw materials. The "frit" process consists in a thermal treatment (between 1100 °C to 1200 °C) that transforms the components in to an anhydrous condition, generating glass crystals.

Enamels containing Fritango® are used in products subject to temperatures under 1200°C.)

See detailed descriptions of APPLICATIONS AND BENEFITS in further pages

CHEMICAL AND PHYSICAL PROPERTIES

B_2O_3	50.0 +/- 1.0 % MIN.
SODIUM SULPHATE (Na_2SO_4)	1.1 - 2.6% TYPICAL
CALCIUM SULPHATE ($CaSO_4$)	2.7 - 3.5 % TYPICAL
CHLORIDES (Cl^-)	5.0 % MAX.
IRON OXIDE (Fe_2O_3)	1.0 % MAX.
INSOLUBILITY	10 -11 % TYPICAL

Salta (Rep. Argentina)
 Ruta Provincial 36 Km.2
 Campo Quijano (CP 4407)
 Tel. +54 0387 4904135 / 4904904
 Fax +54 0387 4904135

Buenos Aires (Rep. Argentina)
 Julio A. Roca 751, 3º Piso, Of. 11
 Cap. Federal (CP 1067)
 Tel. +54 011 43423669 /
 43317239 / Fax +54 011 43431867

Boro do Sul Ltda (Rep. Brasil)
 Rua Prof. Clemente Pinho 446
 04753-100 - Jd. Promissao - SP
 Fone/Fax: (11) 5685-6504
 Web: www.borodosul.com.br



SIEVE SPECIFICATION

Mesh size ASTM Nº 12 = 1% retained

BULK DENSITY

1.20 Ton/m³

SOLUBILITY IN WATER

0.35% B₅O₉NaCa by weight of saturated solution 20 °C

PH

PH = 9.1 (0.35 % solution 20°C)

PACKAGING

FRITANGO® is available in 25 kg multiwall polyethylene sacks or 1000kg big-bags



Salta (Rep. Argentina)
 Ruta Provincial 36 Km.2
 Campo Quijano (CP 4407)
 Tel. +54 0387 4904135 / 4904904
 Fax +54 0387 4904135

Buenos Aires (Rep. Argentina)
 Julio A. Roca 751, 3º Piso, Of. 11
 Cap. Federal (CP 1067)
 Tel. +54 011 43423669 /
 43317239 / Fax +54 011 43431867

Boro do Sul Ltda (Rep. Brasil)
 Rua Prof. Clemente Pinho 446
 04753-100 - Jd. Promissao - SP
 Fone/Fax: (11) 5685-6504
 Web: www.borodosul.com.br



Optical property

Ulexite is white to lightly colored by impurities, commonly clay. Its unique optical property is that it transmits light along the long axis of the crystal by internal reflections, very much in the same way as in fiber optics. Clay particles often hinder this light transmission.

APPLICATIONS AND BENEFITS

Reduction of fusion point

For ambar enamel preparations or boracic fired, the required fusion of elements components (colorants, feldspar, etc) rises to temperatures close to the 3000°C, for which the aggregate of Anhydrous Ulexite Glass (Boron melted) sensitively reduces the melting point, with the subsequent associated savings.

Reduces the consumption of fuel and enlarges the useful life of the oven of fusion

The Anhydrous Ulexite Glass melts to 1100°C. so, the loss of fire fusion of this component is null, that is to say that our Fritango does not consume energy on form changes. In comparison to complementary products (such as Burned Ulexite), its anhydrous form reaching 600°C- requires a greater work of the oven at the moment of fusion.

Minor dragging of contaminant gasses combustion

Anhydrous Ulexite Glass formulae has a gross particle size material with a lack of gas combustion. On the other hand, the Ulexite Burned powder formulae, causes dragging (and losses) of material through emanation of gas combustion. The reason of such physical property lies in the fact that it is very fine dusty material.

Insolubility

Anhydrous Ulexite Glass is a vitreous element practically insoluble in water.

All data in the above specifications are determined by Minera Santa Rita S.R.L. analytical methods, and corresponds to a final average of our production sampling.

Salta (Rep. Argentina)
Ruta Provincial 36 Km.2
Campo Quijano (CP 4407)
Tel. +54 0387 4904135 / 4904904
Fax +54 0387 4904135

Buenos Aires (Rep. Argentina)
Julio A. Roca 751, 3º Piso, Of. 11
Cap. Federal (CP 1067)
Tel. +54 011 43423669 /
43317239 / Fax +54 011 43431867

Boro do Sul Ltda (Rep. Brasil)
Rua Prof. Clemente Pinho 446
04753-100 - Jd. Promissao - SP
Fone/Fax: (11) 5685-6504
Web: www.borodosul.com.br