

64004 Firebrake[®] ZB, flame retardant

Chemical composition: $2\text{ZnO}\cdot_3\text{B}_2\text{O}_3\cdot 3.5\text{H}_2\text{O}$

Synonym: Dodecaboron tetrazinc dicosaoxide heptahydrate, Zinc borate 2335

Composition:

This product contains over 98.8% Zinc borate $2\text{ZnO}\cdot_3\text{B}_2\text{O}_3\cdot 3.5\text{H}_2\text{O}$.

Firebrake[®] ZB, is a special zinc borate, a multifunctional flame retardant and smoke suppressor. Firebrake[®] ZB, having the molecular formula $2\text{ZnO}\cdot_3\text{B}_2\text{O}_3\cdot 3.5\text{H}_2\text{O}$, does not release any water up to 290 - 300°C. Compared to other borates, Firebrake[®] ZB is practically insoluble in water.

Physical and Chemical Properties:

Appearance:	white, odorless powder
Density:	2,7
Vapor pressure:	insignificant (20°C)
Solubility in water:	0.28 % at 25°C
Melting temperature:	approx. 650°C
Molecular weight:	434.66
Flash point:	--
Refraction index:	1.58

Theoretical Composition:

Boron trioxide, B_2O_3	48.05 %
Zinc oxide, ZnO	37.45 %
H_2O	14.50 %