

**FaRetar Flame Retardant Technology Co., Ltd.**

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Email: info@faretar.com Web site: <http://www.faretar.com>**FARETAR™ ZB****Zinc Borate (2ZnO·3B₂O₃·3.5H₂O)****Introduction**

Zinc borate is a multi-functional additive, which has the effects of flame retardance, carbonization, smoke suppression and preventing melting dripping.

General information

Chemical Name:	Zinc Borate
Formula	2ZnO·3B ₂ O ₃ ·3.5H ₂ O
CAS Number	10361-94-1
Molecular Weight	313.79
Appearance	White powder
Specific gravity, g/cm ³	2.7

Characteristics

- Reduce flue gas concentration
- Prevent molten material from dripping
- Can extinguish the arc
- Low toxicity

Applications

Zinc Borate is a multi-functional synergistic flame retardant, added in polymers with other flame retardants (such as Antimony Oxide) to improve flame retardant performance.

Zinc Borate is widely used in PVC applications such as carpet, conveyor belt, wire and cable, and in Nylon, PE, PP and other engineering plastics of halogen free flame retardant systems based on Al(OH)₃ and Mg(OH)₂, intumescent coating and painting, ceramic glaze, milk glass, decorative paper and other fields.

Zinc Borate is also used in wood composite as fungicide to prevent from decay fungi and subterranean termites.

FARETAR™ ZB grade's particle size is the smallest, it is recommended to wire and cable applications that need much fine particle size fields.

Specification

Item	ZB	
	Excellent grade	First grade
Whiteness	99	95
Surface water, %, ≤	0.5	1.0
Particle size, μm	1 - 3	1 - 3
Pb, PPM, <	10	20
Cd, PPM, <	5	10
ZnO, %	37.0 - 40.0	
B ₂ O ₃ , %	46.0 - 48.0	
H ₂ O (hydrate), %	13.0 - 15.5	
Fineness (Residue on 45 μm sieve), %, ≤	0.1	
Specific gravity, g/cm ³	2.67	
Melting point, °C	980	
Temperature of dehydration, °C	290	
Refractive index	1.58	
CAS No.	12767-90-7, 138265-88-0, 1332-07-6	

*Test method: HG/T 4827-2015

Package

Standard package is 25 kg/bag. We can also offer neutral packing based on the customers' requirements.

Storage

Stored in cool, dry and well-ventilated environment.