



ZINC BORATE

Zinc Borates have proven themselves to be highly effective in partial or complete replacement for Antimony Trioxide as a synergist in Polyvinyl Chloride and halogenated polyester formulations as well as in wide range of elastomers, thermoplastic elastomers, polyamides and polyolefins. Zinc Borate is a white, non-hygroscopic free flowing powder. It has a lower specific gravity and offer lower weight per unit volume than Antimony Trioxide. In addition they have lower pigment strength allowing lower pigment loading of highly colored products.

Zinc Borate acts as strong char promoter in many formulations; inhibits combustion and smoke formation by isolating the substrate from atmospheric oxygen. They also suppress afterglow.

Zinc Borate is a special hydrate, which retains water of hydration at temperature up to 280°C, and therefore, high processing temperatures have been used successfully. Zinc Borate is known to exhibit synergism with Zinc Hydroxystannate, Zinc Stannate, Alumina Trihydrate and Antimony Trioxide in halogenated systems.

| Physical Specification | |
|-------------------------------|--|
| Average Particle Size | 3 μm |
| Particle Size, 90% less than | 14 μm |
| Solubility in Water | Insoluble (0.01 gm/100 gm at 400°C) |
| Specific Gravity | 2.74 |
| Oil Absorption | 20 gm/100 gm |
| Refractive Index | 1.59 |
| Chemical Specification | |
| Formula | 2ZnO.3B ₂ O ₃ .3.5H ₂ O |
| Expressed Theoretically as | |
| ZnO | 37.45 % |
| B ₂ O ₃ | 48.05 % |
| H ₂ O | 14.50 % |

Material Safety Data Sheet is available on request. Kindly contact our product team at info@medshieldindia.net