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## Zinc Borate

### About

TCC's **Zinc Borate** is an Environmental Protection Agency (EPA) approved non-halogen flame retardant. The product can be used as a fire retardant in PVC, polyolefins, elastomers, polyamides, and epoxy resins.

In halogen-containing systems, **Zinc Borate** is used in conjunction with antimony oxide. In halogen-free systems, it is normally used in conjunction with alumina trihydrate, magnesium hydroxide, or red phosphorus. In some particular applications, **Zinc Borate** can be used alone.

**Zinc Borate** is an anti-dripping and char-promoting agent, and suppresses the afterglow. In electrical insulator plastics it suppresses arcing and tracking. **Zinc Borate** has a synergistic effect with zinc phosphate or barium borate as a corrosion inhibitor pigment. It acts as a broad-spectrum fungicide in plastics and wood products. It can be used as a flux in some ceramics. In electrical insulators, it improves the ceramics properties.

**Zinc Borate** has a refractive index similar to most polymer systems, which results in the retention of considerable translucence. This allows the use of lower pigment loading as compared to antimony oxide.

**Zinc Borate** has a specific gravity of 2.77 and is considered to be low toxicity.

The most commonly used variety of **Zinc Borate** is 3.5 water zinc, also known as ZB-2335 flame retardant.