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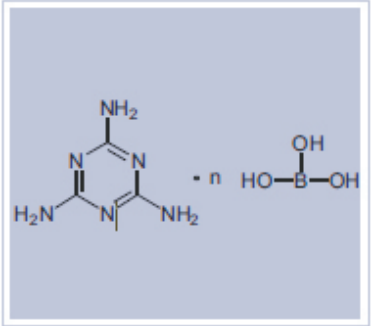
MELAMINE BORATE (MB 302, decomposition point is 250°C)

Halogen free retardants for polymers

PRODUCT BRIEF

Melamine borate is a halogen free retardant, melamine and boric acid based compound. It is a white, poorly water-soluble powder with a decomposition point of above 250 °C. Provided in Boracium and Nitrogen composition, it is used in different polymers and plastics.

Structural formula



Molecular formula:
$(C_3H_8N_6)\ nH_3BO_3$

APPLICATIONS

The retardant, since it has a high decomposition point, can be used for extrusion, as well as in high temperature treated polymers. Melamine allows the product to be used as a carbon backbone in intumescents. Boracium allows the product to be used as a smoke suppressor. The product can be used as a zinc borate substitute in intumescents.

DOSAGE

- To suppress the smoke – 5-10 % of total polymer mass in synergic mixtures with other retardants (ammonium polyphosphate, melamine polyphosphate, metal hydroxides, melamine cyanurate)
- In intumescents – 5-15 % of total polymer mass
- In vinyl acetate polymers – 15 % of total polymer mass

SPECIFICATIONS

Particle size, μm	up to 40
Filtrate's pH, 10% of suspension	5,0-6,0
Decomposition point, °C	≥350
Water solubility at 20 °C, g/100ml	10,5
Boracium content, %	10,0-15,0

CHEMICAL SAFETY DATA SHEET

According to GOST 12.1.007 the product is a low hazardous substance (4th category).
May be harmful if swallowed.

Producer: Novochem LLC (Tomsk)
Melamine borate (MB 302), Specifications 20.14.52-034-67017122-2019