

A: Product description

Proprietary inorganic phosphorus-based halogen free, flame retardant

B: Physical properties

Appearance:	Fine powder
Color	White
Phosphorus (%)	around 24
Nitrogen (%)	around 20
Water solubility (kg/m ³):	around 1 (at 30°C)
Particle size:	D ₅₀ : 10-13 µm

C: Toxicology

Oral toxicity LD₅₀ (rat) > 2000 mg/kg
Dermal Irritation: not irritant, not sensitizer
Water toxicity: EC₅₀ (Daphnia Magna 48 h) > 100 mg/l

D: Transport

Not regulated

E: Applications

Phoslite B65AM is an halogen free flame retardant additive for organic polymers, containing both coated phosphorus, at a low oxidation state, and nitrogen.

Phoslite B65AM is suitable as a solid flame retardant additive for polymers as PBT, PET-G, copolyesters at a 20% loading to get V0 compounds at 1,6mm.

Additional application data and further developments can be discussed with Italmatch Chemicals Technical Development Center.

F: Processing

According to laboratory thermal analyses, Phoslite B65AM results to be stable up to 280-290°C but it will be decomposed if it is submitted to very high shear stresses therefore :

- do not process Phoslite B65AM containing materials at melt temperatures exceeding 280°C,
- avoid high shear stresses,
- avoid prolonged residence time in moulding equipment.

The extrusion process is generally operated in co-rotating twin screw extruders adding the additive in side feeder, using polymers with low moisture content (< 0.15%), lubricant agents and organic dispersants may be used in order to maximize the additive dispersion in the organic matrix.

G: Packaging

The product is available in 15 Kg plastic bags.

H: Storage and handling

The product is stable if maintained in the original bags and in a dry place at room temperature.

Keep the product away from strong oxidizing substances and hot alkaline solutions.

Handle the product in compliance with good industrial practice avoiding dust formation.

The information provided is based on our present knowledge and given as guidance for product use. The loading reported should be only regarded as guidance, however experimental check is needed on the polymer used and the flame retardancy class desired. The data reported do not constitute a guarantee. Quality of product is guaranteed under Italmatch Chemicals General Conditions of Sale. Existing property rights, if any, must be observed.

PHOSLITE — *Halogen free powder flame retardants*