

Piperazine Pyrophosphate (PIP)

Phosphorus-nitrogen flame-retardant component for intumescent polymer systems.

CAS No. 66034-17-1	EC / List No. 457-330-7	Transport Non-dangerous goods
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Product Information

Phosphorus-nitrogen flame-retardant component for intumescent polymer systems.

Specifications

Parameter	Specification
Appearance	White powder
Whiteness	≥95 %
Water	≤0.5 %
Average particle size	9–15 μm
Phosphorus	23–25 %
Nitrogen	10–12 %
Decomposition temperature	≥280 °C

Older supplied P23–25% and N10–12% specification retained. The conflicting newer N≥14% value is not adopted.

Typical Properties

Property	Typical Value
Molecular formula	C ₄ H ₁₄ N ₂ O ₇ P ₂
Molecular weight	264.11 g/mol

Applications

Intumescent polyolefins: Phosphorus-nitrogen additive for qualified polypropylene and polyethylene systems.

EPDM and TPE systems: Flame-retardant component for selected elastomer formulations.

Coatings and polymer development: Ingredient for qualified phosphorus-nitrogen packages.

Packaging / Storage

Item	Information
Packing	25 kg composite woven bags with inner liners
Storage	Keep containers tightly closed in a cool, dry, ventilated storage area. Protect from direct sunlight and contamination; separate from incompatible chemicals.
Handling	Use effective ventilation and compatible chemical-resistant gloves and eye protection. Avoid splashes, mist or dust; maintain emergency washing facilities and good industrial hygiene.

Company Contact

Supplier	Hainan Zhongxin Chemical Co., Ltd. (ZXCHEM)
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