

Description

This flame retardant is a phosphorus, nitrogen halogen-free flame retardant for polypropylene, it can be used in homopolymerization, copolymerization, non-reinforced PP blending and glass fiber reinforced PP and compliance with the EU ROHS directive and REACH regulations requirements.

Physical and Chemical Properties

Items	Index	Items	Index
Appearance	White Powder	Environmental Requirement	Compliance With ROHS REACH
Whiteness%	≥90	Moisture %	≤0.3
Nitrogen,N%	≥16	Phosphorus,P %	≥17

General Characteristics

1. Phosphorus and nitrogen intumescent flame retardant, halogen-free environmental protection, resistance to metal corrosion, no water slip
2. Homopolymerization PP, Copolymerization PP, PP Blends are available, 1.6mm UL94 V-0, PP modified material mechanical, electrical properties are excellent.
3. Glass fiber reinforced PP can solve the wick effect, 1.6mm UL94 V-0 grade.
4. A certain amount of toughening agent can be added without affecting the flame retardant
5. The product can pass the double 85 experiment test

Application Suggest

Homo-polymerization PP		Co-polymerization PP & PP Blends	
Loading	Rating (UL-94)	Loading	Rating (UL-94)
20%~28%	V-0	22%~30%	V-0



Application

1. Glass Fiber Reinforced PP

Item	1#	2#	3#
PP (T30S) , %	46	—	23
PP (7726H) , %	—	46	23
PP Special Halogen-Free Flame Retardant, %	24	24	24
Glass Fiber Reinforced PP, %	30	30	30
UL94 (1.6mm)	V-0	V-0	V-0

2. Non-reinforced PP

Item		1#	2#	3#	4#
PP (T30S) , %		76	—	37	50
PP (7726H) , %		—	74	37	—
PP Special Halogen-Free Flame Retardant, %		24	26	26	—
Bromo-antimony flame retardant, %		—	—	—	30
Other, %		—	—	—	20
vertical burning	UL94(1.6mm)	V-0	V-0	V-0	V-0
vertical burning (double 85 methods)	UL94(1.6mm)	V-0	V-0	V-0	V-0
Tensile strength, MPa	GB/T 1040.5-2008	29.14	21.34	17.86	26.73
bending strength, MPa	GB/T 9341-2008	45.03	34.87	26.93	44.38
Notched impact strength, kJ·m ⁻²	GB/T 1043.1-2008	2.74	2.49	3.47	2.23
Un-notched impact strength, kJ·m ⁻²	GB/T 1043.1-2008	38.35	Unbroken	Unbroken	13.93
GWFI, °C	GB/T 5619.10-2017	960	960	960	960
GWIT, °C	GB/T 5619.10-2017	800	800	800	625