

FLAME DEFENSE SERIES FD409

Typical Physical Properties

Color	white to off-white
Specific Gravity	3.17
Median Particle Size (microns)	2-3
99% Less Than (microns)	25
Decomposition Temp.	>550°F (>290°C)

The FD409 reactive synergist blend has been specially formulated to provide a good balance of flame retardant performance and reduced cost when used as a partial Antimony Trioxide replacement in PVC and other polymer systems where a halogenated flame retardant is used. Depending on the specific polymer compound formulation, it is typically possible to replace between 30 and 50% of Antimony Trioxide.

For further guidance it is recommended that customers contact the R.J. Marshall Company to discuss their specific recipes.

Flammability Performance Summary		
Formulation Ingredient (phr)	Control	FD409
PVC Resin	100	100
DINP	45	45
Ca-Zn stabilizer	6	6
Stearic Acid	0.3	0.3
ATH	60	60
AO Synergist	5	2.5
FD409 Synergist	0	2.5
Limiting Oxygen Index %	35	36
Peak Heat Release Rate (kW/m ²)	182.8 ± 17.3	182.3 ± 13.5
Total Heat Release (MJ/m ²)	31.8 ± 9.5	36.3 ± 8
Ignited Y/N	Y	Y

More detailed case studies are available for discussion on this product.

HEALTH AND SAFETY: Refer to the Safety Data Sheet

PACKAGING: 50 lb plastic bags, pallet weight 2500 lbs.

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