

FLAME DEFENSE SERIES

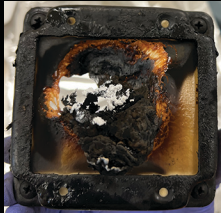



FD313

Typical Physical Properties

Color	white to off-white
Specific Gravity	3.48
Median Particle Size (microns)	2-3
Decomposition Temp.	>550°F (>290°C)

The FD313 reactive synergist blend has been specially formulated to serve as a 100% replacement of Antimony Trioxide in PVC compounds where the Antimony Trioxide loading is between 2 and 5 phr.

The product also has efficacy in other polymer types where the primary flame retardant is halogen-based.

Flammability Performance Summary			Burn Test*	
Formulation Ingredient (phr)	Control	FD313	Control	FD313
PVC Resin	100	100		
DINP	45	45		
Ca-Zn Stabilizer	6	6		
Stearic Acid	0.3	0.3		
ATH	60	60		
AD	3.2	0		
FD313 Synergist	0	3.2		
Limiting Oxygen Index %	35.0	35.0		

*PVC compound plaques burned in a horizontal plane for 9 minutes with a Bunsen Burner shows that the flame penetrates the PVC compound containing Antimony Trioxide. In contrast, the equivalent compound containing FD313 creates a robust char.

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

For further guidance it is recommended that customers contact matsolutions@rjmarshall.com to discuss their specific recipes.

HEALTH AND SAFETY: Refer to the Safety Data Sheet

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

October 2023