

MELAMINE CYANURATE

MCA is an environmentally friendly, advanced, nonhalogenated flame retardant mainly for polyamide 6, polyamide 66, glass fiber reinforced polyamide and additionally polyurethane foam, unsaturated polyester, epoxy resin and rubber applications.

- MCA decomposes and releases incombustible N2, CO2 and H2O gases in high temperature and dilute oxygen gas in the atmosphere. This process absorbs a large quantity of heat and retards burning.
- A nylon compound with MCA can achieve UL94 V-0 rating when it is unfilled nor mineral filled; however, for glass fiber or mineral filled systems, better than UL94 V-2 ratings can be obtained only with use of other synergists.
- MCA may accelerate char-forming.
- Superior performance compared to other flame retardants.
- Halogen free, lower smoke density, low smoke toxicity and less corrosion.
- Better electrical and mechanical properties.
- Good thermal stability, excellent dispersibility.





Chemical and Physical Properties						
Appearance (Color)	White	Excess cyanuric acid (%)	max 0.2			
Weight Loss (%, at 305°C)	max 1	Excess melamine (%)	< 0.1			
Melamine Cyanurate Content (%)	min 99.5	Density (g/cm³)	1.6 - 1.8			
Particle size (d50, micron)	max 2	pH value (10% suspension)	5.5 - 7.5			
Water Content (%)	max 0.4	Whiteness Index (Hunter)	min 95			



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Resin / Material as Carrier	MCA
PA	• • •
PBT	0
РР	0
PE	0
PVC	
PU	0
TPE	• •
Ероху	0
Acrylic	0
Rubber	0
Paper / Wood	

- Recommended applications (A greater number of round signs indicates a higher prevalence of this application in practical use.)
- Theoretically applicable, but no identified commercial uses are available