

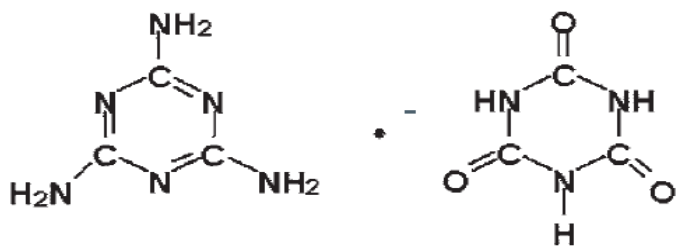
Melapur[®] MC

Halogen free melamine-based flame retardant for polyamides, PBT and TPU

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Characterization	Melapur [®] MC (melamine cyanurate) is a salt of melamine and cyanuric acid, suitable for flame retarding polyamides, PBT, thermoplastic polyurethanes (TPU) and other substrates.
Chemical Name	1,3,5-triazine-2,4,6 (1H,3H,5H)-trione, compound with 1,3,5 triazine-2,4,6 triamine (1:1)
CAS number	37640-57-6
Chemical Formula	
Molecular weight	225.2 g/mol
Applications	Melapur [®] MC is used as an effective flame retardant, primarily for electrical & electronic applications (connectors, switches, housings, etc.) made from polyamide or TPU. In unfilled or mineral filled compounds, it gives a UL94 V-0 rating; in glass filled system only a UL94 V-2 rating is possible.
Features/benefits	Addition levels of Melapur [®] MC are relatively low, giving good economics, mechanical properties and lower specific gravity compared to compounds containing halogen/antimony flame retardant systems. Being halogen free also results in significant advantages in terms of fire safety, i.e. lower smoke density, lower smoke toxicity and less corrosion. Lower corrosivity offers advantages both in the processing stage and in case of a fire. In the processing stage lifetime of barrels and molds will be extended, resulting in decreased equipment costs.

Product form	Melapur® MC XL Melapur® MC50 Melapur® MC25 Melapur® MC15	Granule White powder White powder White powder
Guidelines for use	PA 6 unfilled PA 66 unfilled PA 6 and PA66 mineral filled PA6 and PA66 glass filled	UL94 V-0 at 10 – 12 wt % UL94 V-0 at 6 – 8 wt % UL94 V-0 at 13 – 15 wt % UL94 V-2 at 15 – 20 wt % Glow wire 960 °C CTI > 500 Volt
Physical Properties	PH value: (Saturated sol.,20°C) Specific gravity (20 °C) Melt range:	5-6 1.7 g/cm3
	Melapur® MC 15 Melapur® MC 25 Melapur® MC 50 Melapur® MC XL	440 °C (sublimates) 440 °C (sublimates) 440 °C (sublimates) 440 °C (sublimates)
	Bulk density:	
	Melapur® MC 15 Melapur® MC 25 Melapur® MC 50 Melapur® MC XL	0.24 g/ml 0.18 g/ml 0.41 g/ml 0.45-0.70 g/ml
	Angle of repose:	
	Melapur® MC 15 Melapur® MC 25 Melapur® MC 50 Melapur® MC XL	45 ° 47 ° 52 ° 34 °
	Solubility (20°C)	%W/W
	Water	<0.01 g/l

Volatility	TGA on pure substance; heating rate 20°C/min in air
Temperature (°C)	Weight loss (%)
305	1.0
320	2.0
340	5.0

Handling & Safety

Detailed information on handling and any precautions to be observed in the use of the product(s) described in this leaflet can be found in our relevant safety data sheet.

Note

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