

Description

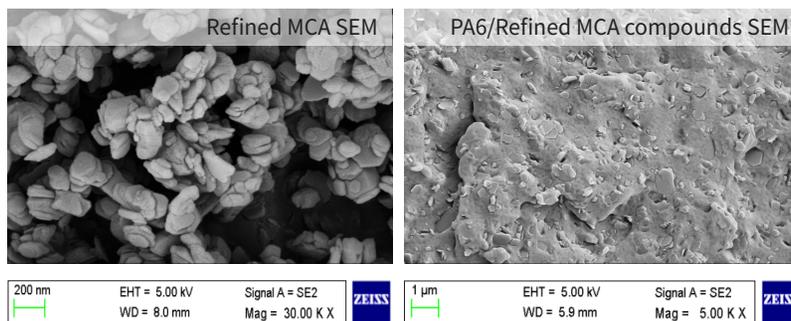
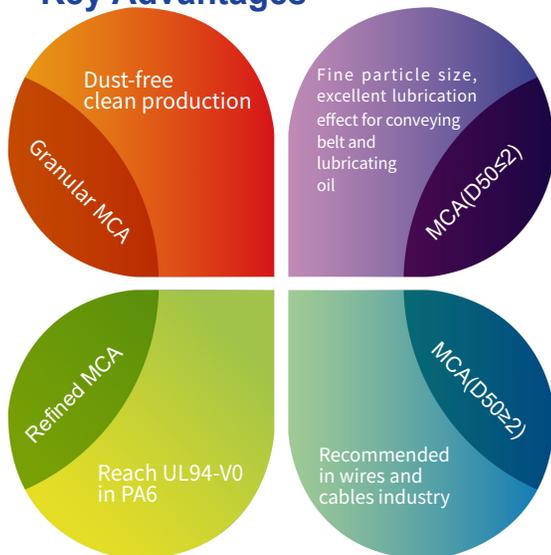
Melamine Cyanurate (MCA) is a nitrogen contained flame retardant, has the advantages of halogen free, high efficiency, low toxicity, low smoke, high thermal stability and low heat loss at 300°C . It is white crystalline fine powder, odorless and tasteless, with a sense of greasy, difficult to dissolve in water, soluble in formaldehyde, ethanol and other organic solvents. It is oily and can be dispersed in oil media.

As a new type of highly effective additive flame retardant, MCA is widely used in rubber and plastics.

Physical and Chemical Properties

Item	Unit	MCA	Granular MCA
Appearance	—	White Powder	White Granula
Purity	%	≥99.5	≥99.5
Melamine Residue	%	≤0.1	≤0.1
Cyanuric Acid Residue	%	≤0.2	≤0.2
Moisture	%	≤0.2	≤0.3
Whiteness	%	≥96.0	—
PH Value(50g/L)	—	5.0~7.5	5.0~7.5
Particle Size(D50)	μm	≤2	—
Particle Size(D50)	μm	≥2	—

Key Advantages



Application

Recommended to be used in conveyor belt, epoxy adhesive, low smoke halogen-free wire and cable and nylon modified compound.



Melamine Cyanurate Production Process

The production methods of melamine cyanurate mainly include cyanuric acid method and urea method.

1.Urea Method

While urea is pyrolyzed to generate cyanuric acid, melamine is added for reaction, or urea and melamine are heated and melted together to obtain the crude melamine cyanurate in one step, which is then acid boiled, washed, and dried to obtain a product with higher purity. of melamine cyanurate.

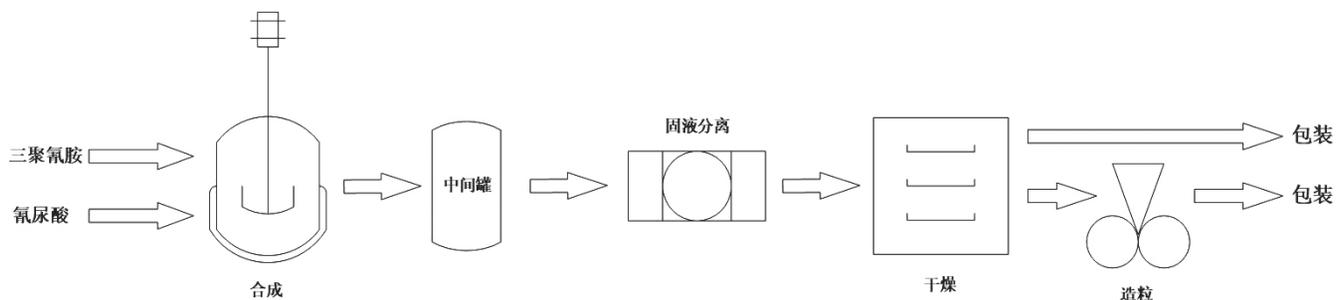
2.Cyanuric Acid Method

The suspension is made by a certain molar ratio of melamine and cyanuric acid dissolved in water, and reacts for several hours at a certain temperature. After the reaction is completed, the finished product is obtained by press filtration and drying, and the mother liquor can be recycled and used

3.Comparison of two processes

Production Process	Urea Method	Cyanuric Acid Method
Raw Materials	Urea, Melamine	Melamine, Cyanuric Acid
Advantages	Low raw material cost	The process is simple, the mother liquor can be recycled, high purity, the particle size is controllable
Disadvantages	High Energy Consumption, Poor temperature control affect product appearance	Higher raw material cost
Taixing Production Process		●

4.Process Flowchart



Melamine Cyanurate Applications

Application And Benefits	MCA	Refine MCA	Granular MCA
Processability	★★★★★	★★★★★	★★★★★
Applications	Conveyor Belt, Epoxy Potting Adhesive Elastomer, Silicone Rubber	PA6	PA6