



Plastic & polymer additives and solution supplier
E:info@novistagroup.com I : www.novistagroup.com

Technical Data Sheet

ProFlame-MC15 /MC25/MC50/MC-G

Trade Name: Melamine cyanurate MCA

Molecular Formula: C₆H₉N₉O₃

CAS NO.: 37640-57-6

MCA is a kind of high effective nitrogen halogen free flame retardant. It is very stable when the temperature is lower than 300°C. However, sublimation will happen when the temperature is above 350°C. The decomposition temperature of MCA is 440°C ~ 450°C. The flame retardancy takes effect through absorbing heat and releasing incombustible gases after sublimation.

Tech Specification

Item	MC-15	MC-25	MC-50	MC-G
Appearance	White powder	White powder	White powder	White granule
MCA,%	≥99.5	≥99.5	≥99.5	≥99.5
Residue cyanuric acid,%	≤0.2	≤0.2	≤0.2	≤0.2
Residue melamine,%	≤0.3	≤0.3	≤0.3	≤0.3
Decomposition temperature	≥ 350	≥ 350	≥ 350	≥ 350
Whiteness	≥ 96	≥ 96	≥ 96	≥ 96
Moisture,%	≤0.2	≤0.2	≤0.2	≤0.2
PH value	5.0-7.0	5.0-7.0	5.0-7.0	5.0-7.0
Density, g/cm ³	1.60-1.70	1.60-1.70	1.60-1.70	--
Bulk density, g/cm ³	0.30-0.40	0.30-0.40	0.30-0.40	--
Particle size D50, um	≤2.5	≤4.0	≤4.0	--
D98, um	≤15.0	≤25.0	≤50.0	--

Application

MCA is especially suitable for PA6 and PA66 without filler. PA6 and PA66 with MCA can pass the tests of UL 94 V-0 (0.75mm), GWFI 960°C and GWIT 750°C.

It can be used as flame retardant in wires and cables made from TPU, pipe made from polyamide and epoxy sealant, etc. It can meet high surface requirement of wires and cables.



Plastic & polymer additives and solution supplier
E: info@novistagroup.com | I : www.novistagroup.com

Recommended usage in PA66/PA6

Type	Dosage in PA6	Dosage in PA66	Flame Retardancy UL 94	
Un-reinforced system	10% -14 %	8%-12%	UL 94 V-0 (1.5mm, 3.0mm)	GWFI 960°C (3.0mm)
Mineral filling system	13%-15 %	13%-15%	UL 94 V-2 (1.5mm, 3.0mm)	GWFI 960°C (3.0mm)
10%-15% glass fiber reinforced system	11%-16 %	10%-15%	UL 94 V-2 (1.5mm, 3.0mm)	GWFI 960°C (3.0mm)

Recommended usage in TPU/TPE & EP

Substrate	Usage	Flame Retardancy
TPU/TPE	MC15/MC25/MC-G + Organic hypophosphite/phosphonate	VW-1
EP	MC15/MC25/MC-G + APP801H + ATH	UL 94 V-0 (3.0 mm)

Package & Storage

20kg paper bag with PE inner bag.

Should be stored in dry and ventilated storeroom. This product is non-dangerous. For other operations, please refer to SDS instructions provided by the manufacturer.

www.novistagroup.com info@novistagroup.com +86-536-8206760

The information presented herein is believed to be accurate and reliable, but is presented without guarantee or responsibility on the part of Novista Group and its subsidiaries. It is the responsibility of the user to comply with all applicable laws and regulations and to provide for a safe workplace. The user should consider any health or safety hazards or information contained herein only as a guide, and should take those precautions which are necessary or prudent to instruct employees and to develop work practice procedures in order to promote a safe work environment. Further, nothing contained herein shall be taken as an inducement or recommendation to manufacture or use any of the herein materials or processes in violation of existing or future patent.