



Product Data Sheet

Celogen[®] 760A

Non-Plateout Azodicarbonamide

Form:	light yellow free flowing powder
Particle Size:	~ 9 µm (microns)
Specific Gravity:	2.06
Decomposition Point:	200-205 °C (394-401 °F)
Gas Yield:	160 cc/gram (polymer dependent)

Function and Compounding

Designed for use in molding and extrusion where foaming agent plateout (cyanuric acid) can cause deposits on screw, mold, or die. This azodicarbonamide is self nucleating.

Composition, Formation and Prevention of Plateout

Plateout is a deposit on the screws, die, or mold surfaces of injection molding and extrusion equipment. This deposit can cause die and vent blockage, and reduce screw efficiency. When azodicarbonamide type chemical foaming agents are used to make foamed polymers, a solid decomposition residue known as cyanuric acid can be formed. This material is a white, crystalline solid that is formed from three molecules of cyanic acid gas, and for this reason, is referred to as a sublimate. The nonplateout Celogen 760-A was developed to eliminate the cyanuric acid solid decomposition residue

The nonplateout grade of Celogen AZ consists of 60% of a selected Celogen AZ of 4 µm (microns) particle size, and 40% of a proprietary silica, physically blended together. The silica carries water of hydration on its surface. During decomposition, the water on the silica reacts with the cyanic acid gas to form ammonia and carbon dioxide, thereby preventing the formation of the cyanuric acid residue. The nonplateout grades are not considered hazardous, and have some of the same FDA approvals for use in food contact applications as the pure Celogen AZ grades. The silica used in these products is an amorphous type, and also has some FDA approvals for use as a direct food additive. These grades, like pure azodicarbonamide, are also considered pulmonary sensitizers.

