



Masterbatches e Additivi per Materie Plastiche ed Elastomeri

FERRO-PLAST S.r.l.

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FerroFoam C Series

Informazioni Tecniche

ENDOTHERMIC FOAMING AGENTS

Description

FERROFOAM C SERIES a group of inorganic compound is well known as effective and nucleating agent for plastics such as PS, ABS, PE, PP and modified PPO.

Usual foaming agents are exothermic systems which liberate large amounts of heat during decomposition. This ordinarily leads to irregular cell structure and local overheating especially in the marginal zones. Contrary to most foaming agents, **FERROFOAM C SERIES** has endothermic decomposition characteristics.

FERROFOAM C SERIES is white, odourless, non-toxic and free-flowing powder and releases carbon dioxide and water vapour during thermal decomposition. It gives no incrustation against screw and hopper, allowing extruder to operate for a long time before cleaning is necessary. All ingredients of **FERROFOAM C SERIES** meet FDA regulations and can be used for food stuffs.

Properties

Item	Specification		
Grade Name	C-850	C-709	C-129
Chemical Name	Surface coated sodium bicarbonate		Specially coated sodium bicarbonate
Appearance	Fine White Powder		
Decomposition Temperature (°C)	150~220	155~165	155~165
Gas Volume (ml/g, at 25°C)	110~130	140~160	140~160
Average Particle Size	5.2~6.2	6.0~7.0	6.0~7.0
Solubility (g sample/100 ml solvent)	Soluble in water and insoluble in organic solvents		

Applications

FERROFOAM C SERIES allow smaller cells with regular distribution (by nucleating effect) and smooth surface (easy lacquer coating) than Azodicarbonamide. They are free from discolouring troubles.

FERROFOAM C SERIES can be used in both extrusion and injection moulding system. The commended dosage level is 0.2~1.0% by weight. In practical usages, the processing temperature of 180~230°C is suitable.

FERROFOAM C SERIES can be also widely used as a nucleating agent to directly gas thermoplastics such as Polyolefines, Polystyrene, EVA and PVC using freon, pentane, butane, nitrogen and carbon dioxide.

They will nucleate the high pressure gases into fine cellular structure in many different thermoplastics such as PS, ABS, PE, PP and modified PPO by the process of injection and extrusion system.

Selection guide for FerroFoam C Series

Grade Name	PS	LDPE	HDPE	PP	ABS	PVC
C-850	○	○	○	○	○	○□
C-709	○□	○□	○□	○	○	□
C-129	○□	○□	○□	○	○	○□

○ : as foaming agent

□ : as nucleating agent