Technical Information

TI/EVK 1046 e September 2010 Plastic Additives

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We create chemistry

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Characterization

Chemical name

CAS number

Chemical formula

Molecular weight

Features/benefits

Applications

Irgastab[®] FS 410

Non-Phenolic Processing Stabilizer System

Irgastab FS 410 is a system composed of a high molecular weight hydroxylamine Irgastab FS 042 and a high molecular weight hindered amine BASF Chimassorb[®] 944 in a 1:1 ratio. The system shows excellent compatibility, high resistance to extraction and low volatility.

Irgastab FS 042 Chimassorb 944

Oxidized bis(hydrogenated tallow alkyl) amines Poly[[6-[(1,1,3,3-tetramethylbutyl)amino]-1,3,5-triazine-2,4-diyl][(2,2,6,6¬tetramethyl-4-piperidinyl)imino]-1,6hexanediyl[(2,2,6,6-tetramethyl-4-piperidinyl)imino]])

Preparation



Irgastab FS 042

Irgastab FS 042 Chimassorb 944

Irgastab FS 410 FF

538 g/mol M_n = 2000 – 3100 g/mol

Irgastab FS 410 is used as a processing stabilizer in polyolefin applications where low color and low gas fade discoloration are required.

Irgastab FS 410 provides outstanding processing stability to polyolefins while virtually eliminating any gas fade discoloration that may occur when phenolic systems are used. The system also provides both long-term thermal stability as well as a higher level of light stability than would be seen with phenolic processing stabilizer systems. Furthermore Irgastab FS systems also enhance the ability of hindered amines to act as light stabilizers.

Product forms

Guidelines for use

Irgastab FS systems are effective as processing stabilizers when used at 0.075% - 0.1%. They are generally effective at 50% to 60% the concentration of the previously used processing stabilizer.

white to off-white, free-flowing granules

Health & Safety	Irgastab FS 410 exhibits a very low order of oral toxicity and does not present any abnormal problems in its handling or general use.
	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 health and safety information sheet.
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