## **Technical Information**

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## **Plastic Additives**



® = registered trademark of BASF SE

## Irgastab<sup>®</sup> FS 811

## High performance, multi-functional phenol-free stabilizer system

Characterization

Irgastab FS 811 provides good processing and long-term thermal stability as well as outstanding light stability.

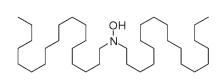
**Chemical name** 

Irgastab FS 042 Tinuvin 770 Chimassorb 944 Bis-(hydrogenated tallow alkyl)amines, oxidized Bis(2,2,6,6-tetramethyl-4-piperidinyl) sebacate; Poly[[6-[(1,1,3,3-tetramethylbutyl)amino]-s-triazine-2,4-diyl][(2,2,6,6 tetramethyl-4-piperidyl)imino] hexamethylene[(2,2,6,6-tetramethyl-4-piperidyl)imino]]

**CAS** number

Preparation

Chemical formula



Irgastab FS 042

HN OC(CH<sub>2</sub>)<sub>8</sub>CO NH

Tinuvin 770

H-N-(CH<sub>2</sub>)<sub>6</sub> N N (CH<sub>2</sub>)<sub>6</sub> N n (CH<sub>2</sub>)<sub>6</sub> N n tert. C<sub>6</sub>H<sub>17</sub>

Chimassorb 944

Molecular weight

Irgastab FS 042 538 g/mol; Tinuvin 770 481 g/mol;

Chimassorb 944  $M_n = 2000 - 3100 \text{ g/mol}$ 

**Applications** 

Irgastab FS 811 is a highly effective process, long-term thermal, and light stabilizer system for polypropylene homopolymer, copolymer, impact modified polypropylene and filled polypropylene. It is especially effective in protecting white, grey and black pigmented compounds and final parts from discoloration due to weathering or due to extended storage. Irgastab FS 811 is a multi-functional stabilizer system that provides good process, long-term heat and outstanding light stability. Because it is a phenol-free stabilizer system, it is not prone to the discoloration problems that may arise during the storage of compounds or molded parts. In addition, because it contains a low and high molecular weight hindered amine, it is especially effective in preventing the fading or discoloration of white, grey or black pigmented polypropylene compounds during weathering.

**Product forms** 

Irgastab FS 811 FF white to off-white granules

Guidelines for use

The recommended use concentration is 0.5 % to 1.0 %. For most polypropylene molding applications, there is no need for additional process or thermal stabilization when using Irgastab FS 811.

**Health & Safety** 

Irgastab FS 811 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.

Note

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