



Ciba® IRGANOX® PS 802

Thiosynergist Heat Stabilizer

Characterization	IRGANOX PS 802 is a dialkyl ester of thiodipropionic acid. It is used as a heat stabilizer in combination with a phenolic antioxidant.	
Chemical name	Dioctadecyl 3,3'-thiodipropionate.	
CAS number	693-36-7	
Structure	IRGANOX PS 802	
	$\left[\text{H}_{37}\text{C}_{18} - \text{O} - \overset{\text{O}}{\parallel}{\text{C}} - \text{CH}_2 - \text{CH}_2 \right]_2 \text{S}$	
Molecular weight	683 g/mol	
Applications	Polymer materials requiring long-term thermal stability Polyethylene power cables XLPE power cables HDPE pipe Polypropylene Polyolefin under-hood automotive applications Styrene homo- and copolymers, Adhesives	
Features/benefits	IRGANOX PS 802 used in combination with a primary phenolic antioxidant provides long-term heat stabilization to polymeric materials. With the lowest volatility of all thiosynergists, it combines excellent performance with low odor.	
Product forms	<i>Code:</i> <i>Appearance:</i>	IRGANOX PS 802 FL white to slightly yellow flake
Guidelines for use	In general IRGANOX PS 802 can be used to improve the long-term heat stability of polymers at recommended levels of 0.05-1%. In peroxide cross-linked power cables, 0.02 - 0.03% IRGANOX PS 800 in combination with 0.02-0.03% IRGANOX 1035.	
Physical Properties	<i>Melting Range</i> <i>Flashpoint</i> <i>Vapor Pressure (20°C)</i> <i>Bulk density (FL Form)</i>	64-67°C 257°C Markusson 6.6 E-6 Pa 400-450 g/l
	Solubility (20°C) <i>Water</i> <i>Acetone</i> <i>Chloroform</i> <i>Ethanol</i> <i>Ethyl acetate</i> <i>n-Hexane</i> <i>Methanol</i> <i>Methylene chloride</i> <i>Toluene</i>	g/100g Solution < 0.01 1 20 1.5 1.7 1.8 1 13 10

Handling & Safety In accordance with good industrial practice, handle with care and prevent contamination of the environment. Avoid dust formation and ignition sources.
For more detailed information please refer to the material safety data sheet.

Registration IRGANOX PS 802 is listed on the following Inventories:

Australia	AICS
Canada	DSL
China	ECSC
Europe	EINECS
Japan	ENCS
Korea	ECL
New Zealand	TSA
Philippines	PICCS
Switzerland	BUWAL
USA	TSCA

IRGANOX PS 802 is approved in many countries for use in food contact applications.
For detailed information refer to our Positive List or contact your local sales office.

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