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Irganox® PS 802

Thiosynergic 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.

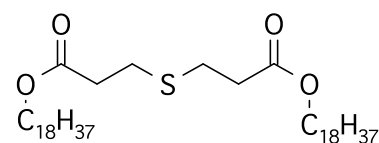
Chemical name

3,3'-Thiodipropionic acid dioctadecylester.

CAS number

693-36-7

Chemical formula



Molecular weight

683 g/mol

Applications

- Polymer materials requiring long-term thermal stability
- Polyethylene power cables
- XLPE power cables
- HDPE pipe
- Polypropylene
- Polyolefin under-the-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 BASF thiosynergists, it combines excellent performance with low odor.

Product forms

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 802 in combination with 0.02 % – 0.03 % Irganox 1035.

Physical properties

| | |
|------------------------|-------------|
| Melting range | 64–67 °C |
| Flashpoint | 257 °C |
| Vapor pressure (20 °C) | 6.6 E-6 Pa |
| Specific gravity | 0.98 g/ml |
| Bulk density FL | 400–450 g/l |

| Solubility (20 °C) | g/100 g Solution |
|---------------------------|-------------------------|
| Acetone | 1 |
| Chloroform | 20 |
| Ethanol | 1.5 |
| Ethyl acetate | 1.7 |
| n-Hexane | 1.8 |
| Methanol | 1 |
| Methylene chloride | 13 |
| Toluene | 10 |
| Water | <0.01 |

Health & Safety

Irganox PS 802 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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