Ciba® IRGANOX® B 900

Synergistic Processing and Long-Term Thermal Stabilizer System

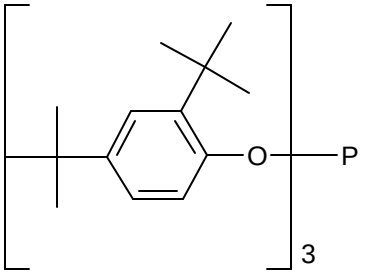
Characterization IRGANOX B 900 - a processing and long-term thermal stabilizer system - is a synergistic blend of IRGAFOS 168 and IRGANOX 1076.

Chemical Name 80 % IRGAFOS 168 ; 20 % IRGANOX 1076

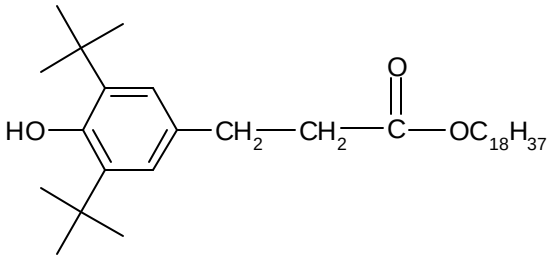
CAS Number Preparation

Structure

IRGAFOS 168



IRGANOX 1076



Molecular weight **646.9** **531**

Applications IRGANOX B 900 is mainly used in polyethylene and ethylene co-polymers, such as ethy-lene-vinylacetate copolymers. The blends can also be used in other polymers such as engineering plastics e.g. polycarbonates, polyesters, styrene homo- and copolymers, polyurethanes, elastomers, adhesives, and other organic substrates. IRGANOX B 900 can be used in combination with light stabilizers of the TINUVIN and CHIMASSORB range.

Features/Benefits IRGANOX B 900 is a convenient blend addressing a range of stabilization needs. The relatively high phosphite content of IRGANOX B 900 addresses applications with demanding processing conditions. In the recommended applications IRGANOX B 900 provides significant advantages, such as

- Maintenance of original melt flow
- Low color formation
- Improvement of long-term thermal stability

IRGAFOS 168 - an organophosphite of low volatility and particularly resistant to hydrolysis - protects during processing organic polymers which are prone to oxidation. IRGANOX 1076 - a hindered phenolic antioxidant - contributes synergistically to the polymer's stabilization

during processing and provides long-term thermal stability by preventing thermo-oxidative degradation during service life.

Additional performance improvements can be achieved in synergistic combinations with other Ciba additives (e.g. thioethers). Blends of IRGANOX 1076 and IRGAFOS 168 with HP-136 (IRGANOX HP products) are particularly effective.

Product Forms

Code:	Appearance:
Powder : powder	white, free-flowing powder
FF:	white, free-flowing granules

Guidelines for Use

In polyethylenes and ethylene co-polymers, the concentration levels for IRGANOX B 900 range typically between 0.1% and 0.25% depending on substrate and processing conditions. The optimum level is application specific. Extensive performance data of IRGANOX B 900 in various organic polymers and applications are available upon request.

Physical Properties

Bulk Density	powder	530 - 630 g/l
	FF	480 - 570 g/l

Handling & Safety

IRGANOX B 900 requires no special safety measures, provided the usual precautions for handling chemicals are observed. Avoid dust formation and ignition sources.
For more detailed information please refer to the material safety data sheet.

Registration

The registration status for IRGANOX B 900 is derived from the single components.
The components are registered in: Australia, Canada, China, EU, Japan, Korea, Philippines, USA.
They are approved in many countries for use in food contact applications. For detailed information refer to our Positive List or contact your local sales office.