TECHNICAL DATA SHEET
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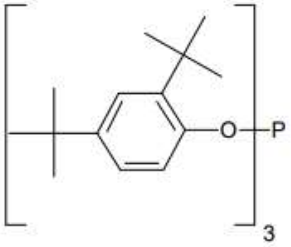
PUREfos 168

Hydrolytically Stable Phosphorus Based Processing Stabilizer

Description: PUREfos 168 is a hydrolytically stable phosphite processing stabilizer. It acts as a secondary antioxidant during plastic processing and protects the polymer matrix by reacting with the hydroperoxides formed at this stage by auto-oxidation. The combination of PUREfos 168 with primary antioxidants provides a synergistic stabilization.

Formula



Chemical name: Tris(2,4-ditert-butylphenyl)phosphite

CAS number: 31570-04-4 **Molecular weight:** 646.9 g/mol

Features & benefits: PUREfos 168 is an organo-phosphite of low volatility and can be used at high processing temperature. It is particularly resistant to hydrolysis. It protects polymers which are prone to oxidation during pelletizing, compounding, converting, recycling as well as any processing step exposing the matrix to oxygen, high temperature and mechanical stress. It prevents molecular weight changes in the material triggered by the degradation processes such as chain scission (dominant in case of PP) and cross linking (dominant in the case of low density PE). It also contributes to reduce discoloration effects such as yellowing or pinking.

Application: Combined with primary antioxidants such as PUREstab 1010 or PUREstab 1076 represent a synergistic blend for applications in polyolefins or olefin-copolymers such as HDPE, LLDPE, PP, EVA, as well as PC, PA. These types of blends can also be used in engineering plastics such as PBT, PET and styrenic elastomers like PS, ABS, BR, SBS as well as tackifier resins and adhesives.

Health & Safety: In accordance with good industrial manufacturing practice, handle with care and prevent contamination of the environment. Avoid dust formation and ignition sources. For more detailed information please refer to the Safety data sheet (SDS)

Physical Properties:

Melting range		181 – 186°C	
Bulk density		Powder 500 - 700 g/l	
Solubility (20°C) g/100g solution		Solubility (20°C) g/100g solution	
- Acetone	1.0	- Chloroform	36.0
- Cyclohexane	16.0	- Ethanol	0.1
- Ethyl-acetate	4.0	- n-hexane	11.0
- Methanol	<0.01	- toluene	30.0
- Methylene Chloride	36.0	- Water	<0.01