

Product Data Sheet

Antioxidant 1010 / 168 - Primary & Secondary Polymer Stabilisers

Description

Description	Antioxidant 1010 (a hindered phenolic primary antioxidant) and Antioxidant 168 (a phosphite secondary antioxidant) are complementary polymer stabilisers almost always supplied and used together. Antioxidant 1010 scavenges free radicals to prevent oxidative degradation, while Antioxidant 168 decomposes hydroperoxides before they generate further radicals – the combination gives substantially better long-term thermal and processing stability than either used alone.
Applications	Polyolefin (PP, PE) processing and long-term thermal stabilisation Engineering plastics, ABS and synthetic fibre stabilisation Adhesives and rubber compounding Wire & cable and film/sheet extrusion applications requiring processing and long-term heat stability
Grade	Standard Industrial Grade (paired primary/secondary antioxidant system)
CAS No.	6683-19-8 (Antioxidant 1010); 31570-04-4 (Antioxidant 168)

Key Benefits

1. Complementary radical-scavenging (1010) and hydroperoxide-decomposing (168) mechanisms give superior long-term and processing stability versus either alone
2. Widely accepted, industry-standard pairing across polyolefin and engineering plastics manufacturing
3. Low volatility and good compatibility supporting reliable performance through high-temperature processing
4. Established, actively traded commodity pairing with global pricing benchmarks

Chemical Analysis & Physical Data

Typical Specification

Parameter	Test Method	Unit	Antioxidant 1010	Antioxidant 168
Assay (min)	HPLC Method	wt%	98.0%	98.0%
Melting Point	Standard Melting Point Method	°C	110 - 125	183 - 186
Volatile Matter (max)	Gravimetric Method	wt%	0.5%	0.5%
Ash Content (max)	Gravimetric Method	wt%	0.1%	0.1%
Acid Value (max)	Titration Method	mg KOH/ g	-	0.2
Appearance	Visual	-	White crystalline powder	White crystalline powder

Packaging

Packaging 25 kg Kraft Paper Bags / Fibre Drums (with liner)
500 kg / 1,000 kg Jumbo Bags (FIBC)
Custom packaging available on request.

Storage & Handling

1. Store in a cool, dry, well-ventilated area away from direct sunlight
2. Keep containers tightly sealed to prevent moisture pickup and oxidation
3. Avoid prolonged storage at elevated temperatures
4. Keep away from strong oxidising agents and open flame – combustible organic powders

Quality Assurance

1. Every batch is tested against the specification above before dispatch
2. Batch-specific Certificates of Analysis (COA) accompany each shipment for both Antioxidant 1010 and Antioxidant 168, reporting assay and melting point against this TDS
3. COA available on request prior to shipment for buyer pre-approval
4. Third-party inspection (SGS/Intertek) can be arranged on request for regulated-market shipments

Disclaimer: The information provided in this document is based on our current knowledge and is intended as a general guide. Ochnology Solution Pvt. Ltd. reserves the right to modify specifications without prior notice. Buyers are advised to conduct their own testing for specific applications. A batch-specific Certificate of Analysis (COA) is available on request for each shipment.