**TECHNICAL DATA SHEET**
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Innovative Chemistry for a Sustainable Future
India I Singapore I Brunei

# PUREstab MD1024

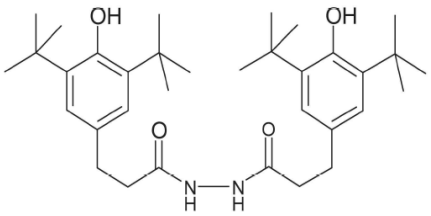
## Metal Deactivator and Antioxidant for Wire and Cable Application

**Description**

**PUREstab MD1024** is a sterically hindered phenolic antioxidant, used in:

- in polyethylene wires and cable resins
- filled polyolefins, SRB, X-SBR
- in contact with copper NBR fuel hoses.
- in styrene homo- and co-polymer

**Chemical Structure**




**Chemical name** 2',3-bis[[3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionyl]] propionohydrazide

**CAS number** 32687-78-8 **Molecular weight:** 553 g/mol

**Features & benefits**

**PUREstab MD1024** is a hindered phenolic antioxidant/metal deactivator used in reducing or preventing the harmful effect of copper or other metals upon various polymers. Widely used in telecommunication wire and cable, provides unmatched extraction resistance and processing stabilization. Can be used alone or with other antioxidants to provide stabilization of polymer in contact with copper, both during processing and long-term service.

**Application**

For any application in contact with copper, the concentration levels range typically between 0.1% and 0.2%. **PUREstab MD-1024** is highly effective to prevent the harmful effects of copper conductors in polymers used as primary wire and cable insulation, including polypropylene, high- and low-density polyethylene, and some thermoplastic elastomers. It is also recommended for use other polymer systems where contact with metals may affect polymer properties and stability, including EPDM, peroxide- and radiation-crosslinked polyethylene, polybutene, styrenic polymers, unsaturated elastomers, PVC, PVB and others.

**Health & Safety**

**PUREstab MD1024** exhibit a very low order of oral toxicity and does not present any abnormal problems in its handling or general use. For more detailed information please refer to the SDS.

**Storage**

**PUREstab MD1024** has to be stored in tightly sealed original container in a cool and wellventilated area, away from direct sunlight.

**Physical Properties**

| | |
|---|---|
| Product form | White free flowing powder |
| Melting range | 221 – 232°C |

| | |
|---|---|
| Flashpoint | >180°C |
| Bulk density | Powder 320 – 380 g/l |
| Solubility (20°C) g/100g solution | |
| - Acetone | 4 |
| - Benzene | 0.1 |
| - Chloroform | 0.4 |
| - n-Hexane | 0.01 |
| - Methanol | 4 |
| - Water | 0.01 |

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November' 2019