

# Polymer Add (Thailand) Co.,Ltd.

Office - 106, Chalarempriakiat, Lor 9, Soi 22, Yak 5, Nongbon, Prawet, Bangkok, Thailand 10250

Factory - 188/3, Moo 8, Tambon Bangpu Mai, Amphoe Muang Samut Prakan, Samutprakan, Thailand 10280

Mobile - Thai : 0804531391, English: 0839415475, E-mail – [contact@polymeradd.co.th](mailto:contact@polymeradd.co.th)



## TECHNICAL DATA SHEET

### ANTIOXIDANT 1024

#### Product classification

| Item              | Description                                                       |
|-------------------|-------------------------------------------------------------------|
| Chemical name     | N,N'-Bis[3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionyl]hydrazine |
| Product name      | Antioxidant 1024                                                  |
| CAS No.           | 32687-78-8                                                        |
| EC No.            | 251-156-3                                                         |
| Molecular formula | $C_{34}H_{52}N_2O_4$                                              |
| Molecular weight  | 552.79 g/mol                                                      |
| Chemical class    | Hindered phenolic antioxidant and metal deactivator               |

#### Physical and chemical properties

| Property                      | Specification             | Test method                    |
|-------------------------------|---------------------------|--------------------------------|
| Appearance                    | White to off-white powder | Visual inspection              |
| Content                       | ≥98.0%                    | HPLC                           |
| Melting range                 | 224–229 °C                | Melting point apparatus or DSC |
| Ash                           | ≤0.10%                    | Gravimetric determination      |
| Light transmittance at 425 nm | ≥96.0%                    | UV–visible spectrophotometry   |
| Light transmittance at 500 nm | ≥98.0%                    | UV–visible spectrophotometry   |

#### Function and performance

Antioxidant 1024 combines primary antioxidant activity with metal deactivation. It helps limit thermal oxidation and the degradation accelerated by contact with metals, particularly copper.

#### Uses and applications

| Material                            | Typical application                                           |
|-------------------------------------|---------------------------------------------------------------|
| Polyolefin wire and cable compounds | Stabilisation of insulation in contact with copper conductors |
| Polyethylene and polypropylene      | Thermal and oxidative stabilisation                           |
| Other compatible polymers           | Stabilisation where metal contact can accelerate oxidation    |

#### Principal benefits

- Combines antioxidant and metal deactivation functions.
- Helps protect polymer properties during processing and use.
- Suitable for copper-contact polymer applications.

# Polymer Add (Thailand) Co.,Ltd.

Office - 106, Chalarempriakiat, Lor 9, Soi 22, Yak 5, Nongbon, Prawet, Bangkok, Thailand 10250

Factory - 188/3, Moo 8, Tambon Bangpu Mai, Amphoe Muang Samut Prakan, Samutprakan, Thailand 10280

Mobile - Thai : 0804531391, English: 0839415475, E-mail – [contact@polymeradd.co.th](mailto:contact@polymeradd.co.th)



## Storage and handling

Store in tightly closed packaging in a cool, dry, well-ventilated area. Protect from heat and ignition sources. Minimise dust formation during handling.

## Packaging

Pack size and packaging configuration are confirmed at the time of order.

## Regulatory information

Suitability for regulated applications depends on the formulation, concentration and destination market.

**Month of creation:** September 2026

**Month of review:** September 2028

POLYMER ADD