

# RUBBER CHEMICALS -ANTIOXIDANTSNON-STAINING

## **ANTIOXIDANT 12**

(Butylated reaction product of p-cresol and dicyclopentadiene)

#### **DESCRIPTION:**

Antioxidant 12 is a sterically hindered polymeric phenol-type non-staining, non-discoloring antioxidant. It is used as a stabilizer and antioxidant in a variety of polymers, including natural and synthetic polyisoprene, neoprene, nitrile, styrene butadiene and latex. Antioxidant 12 complies with 21 CFR FDA Regulations 175.105 (Adhesives) and 177.2600 (Rubber Articles).

#### **TYPICAL PROPERTIES:**

| Form  | Cream Powder      |
|---|-------------------|
| Specific Gravity                              | 1.07              |
| Volatility (loss in 2 hrs. @ $150^{\circ}$ C) | 2% max.           |
| Melting Point                                 | 105°C (221°F) min |

### **APPLICATION:**

Antioxidant 12 is extremely active and persistent due to low volatility and low extractability. It remains active and stable indefinitely and does not hydrolyze.

Antioxidant 12 effectively inhibits degradation of polymers due to heat and oxygen. Color development in polymers is inhibited by improved thermal stability, reducing scorch, and by oxidative and UV stability (A.O. 12 is not considered a UV stabilizer but will yellow less than comparable antioxidants under UV exposure). The excellent thermal stability makes Antioxidant 12 useful in hot melt adhesives.

Antioxidant 12 is also available as an aqueous dispersion for use in latex and latex foam under the name Akrosperse W-9924 AO 12 (50%).

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