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RUBBER CHEMICALS
-ANTIOXIDANTS-
NON-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 (CAS #68610-51-5). It is used as a stabilizer and antioxidant in a variety of polymers, including natural and synthetic polyisoprene, neoprene, nitrile, styrene butadiene and latex.

TYPICAL PROPERTIES:

Form	Amber Pellets, Flakes or White Powder
Specific Gravity.	1.10
Volatility (loss in 2 hrs. @ 150°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 (Antx 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.

The flake form of Antioxidant 12 is easily handled and ground in making aqueous dispersion for use in latex and latex foam. It is not chemically reactive with other known compounding ingredients, so effects on such traits as cure, viscosity, color, etc., are not discernible. Typical usage is one part dry antioxidant to 100 of active latex.

The powdered form of Antioxidant 12 is used in dry rubber compounding. Also, Antioxidant 12 is permitted for use in products in contact with food under FDA Regulations 175.105 (Adhesives) and 177.2600 (Rubber Articles).

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