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RUBBER CHEMICALS
-ANTIOXIDANTS-
NON-STAINING

ANTIOXIDANT 60
(2-Mercapto-4(5)-Methylbenzimidazole)

PRODUCT DESCRIPTION:

Antioxidant 60 (2-mercapto-4(5)-methylbenzimidazole) is a non-discoloring and non-staining antioxidant for natural and synthetic rubbers, except polychloroprene. Protection against heat and oxygen aging is excellent, especially when combined with amine or phenol type antioxidant, wherein a synergistic effect yields results superior to those of the separate constituents. Antioxidant 60 acts as a metal deactivator when used synergistically with Antiozonant PD-1 (black compounds) or Antioxidant 1024 (non-black compounds).

TYPICAL PROPERTIES:

Appearance.	yellow-white micro-granule (oil-treated)
Specific Gravity	1.30
Melting Point	270°C (518°F) minimum
Oil Content	1.5%
Storage Stability.	over two years

APPLICATIONS:

In addition to its antioxidant properties, Antioxidant 60 provides improved protection against rubber poisons, especially in combination with Antioxidant 33 or 235, or Antiozonants PD-1 or PD-2. It also imparts steam resistance to rubber compounds and has a brightening effect on transparent goods.

In spite of its high melting point, Antioxidant 60 disperses readily in rubber mixes. It does have a slight retarding effect in sulfur cures and reduces modulus slightly. Maximum protection is provided in thiuram and dithiocarbamate curing systems containing little or no sulfur.

For general applications, 0.6 - 1.5 phr Antioxidant 60 is used. For heat resistant thiuram cured compounds, 2 - 3 phr is used, or 1 - 2 phr in combination with 1 - 2 phr Antioxidant DQ, Antiozonant PD-1 or PD-2.

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