EASTMAN

Technical Data Sheet

Santoflex™ 7PPD

Applications

- Polymer modification
- Water treatment industrial

Product Description

Chemical name: N-(1,4-dimethylpentyl)-N'-phenyl-p-phenylendiamine
Molecular weight: 282

Eastman Santoflex 7PPD functions as a powerful antioxidant and antiozonant for natural and synthetic elastomer compounds and as a synthetic polymer stabilizer. Santoflex 7PPD provides protection against fatigue degradation in both static and dynamic operating conditions.

Santoflex 7PPD is a liquid p-phenylenediamine used as a polymerization inhibitor.

Typical Properties

Property	Test Method	Typical Value, Units
General		
Form		Liquid
Viscosity		
@ 40°C	FF97.9	116-125 cSt
@ 60°C	FF97.9	25-40 cSt
Specific Gravity		
@ 20°C/15°C	FF97.4	0.9-1.1

Key Attributes

• Santoflex 7PPD provides powerful antiozonant and antioxidant properties with excellent high temperature fatigue and flex resistance to rubber compounds.
• Santoflex 7PPD is a more active antioxidant than quinoline- or diphenylamine-based antioxidants.
• Santoflex 7PPD gives better long-term fatigue resistance and ozone protection than IPPD. Due to its specific molecular structure and higher rubber solubility, it is less affected by environmental variables, such as heat or leaching, leading to greater durability.
• Santoflex 7PPD gives rubber protection against catalytic degradation by copper and other heavy metals.
• It will discolor compounds and cause severe contact and migration staining

Applications

• Santoflex 7PPD applications include the use in pneumatic tire components, solid tires, belts, hoses, cables, automotive mounts, bushings and general mechanical products that are exposed to continuous and intermittent dynamic operating conditions and require protection from ozonation.
• It gives efficient stabilization for a wide range of solution and emulsion polymers.
• Santoflex 7PPD is used as an inhibitor in styrene monomer, p-methylstyrene, divinylbenzene and acrylate esters production and as a column antifoulant

Storage and Shelf Life

Santoflex 7PPD can be stored in drums or in bulk tanks, but it may crystallize below 35°C. If it solidifies, melting the solid with drum heaters or steam cabinets will not affect the quality of the product. For heated bulk storage, at a maximum of 75°C, a nitrogen blanket should be used to prevent product degradation from exposure to oxygen. Do not store material above 75°C for more than 90 days. Also, continuously circulate product stored in heated tanks to minimize temperature gradient and reduce heating element fouling, thus maximizing the product consistency.

The shelf life of Santoflex 7PPD is 24 months from the date of manufacture, based on the recommended handling and storage conditions. Once the material has surpassed shelf life, please contact us if you would like to receive our suggestions for material re-verification, based on key product characteristics.

Handling Precautions

For detailed information on toxicological properties and handling precautions please refer to the current Safety Data Sheet. This information sheet can be downloaded from our web site or requested from the nearest Eastman office and should be consulted before handling this product.

Comments

Properties reported here are typical of average lots. Eastman makes no representation that the material in any particular shipment will conform exactly to the values given.

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