

# **Technical Data Sheet** Santoflex™ 6PPD Pastilles

## **Applications**

- Conveyor belt non-food contact
- Polymer modification
- Rubber modification
- Tires
- Water treatment industrial

#### **Product Description**

Chemical name: No(1,3-Dimethylbutyl)-N'-phenyl-p-phenylenediamine

Molecular weight: 268

Flexsys Santoflex 6PPD functions as a powerful antioxidant and antiozonant for natural and synthetic elastomer compounds and as a synthetic polymer stabilizer. Santoflex 6PPD provides protection against fatigue degradation in both static and dynamic operating conditions.

Santoflex 6PPD is very effective as a polymerization inhibitor.

Santoflex 6PPD pastilles are sold in solid form which melts when heated above ~50°C.

# **Typical Properties**

Property	Test Method	Typical Value, Units	
General			
Form		Solid Pastille	
Melting Point, Final	FF83.9	46-52 °C	
Specific Gravity			_
@ 60°C/15°C	FF97.4	0.986-1.010	

# **Key Attributes**

- •Santoflex 6PPD provides powerful antiozonant and antioxidant properties with excellent high temperature fatigue and flex resistance to rubber compounds.
- •Santoflex 6PPD is a more active antioxidant than quinoline- or diphenylamine-based antioxidants.
- •Santoflex 6PPD gives rubber protection against catalytic degradation by copper and other heavy metals.
- •Santoflex 6PPD 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.
- •It will discolor compounds and cause severe contact and migration staining.

## **Applications**

•Santoflex 6PPD 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 6PPD is used as an inhibitor in styrene monomer, p-methylstyrene, divinylbenzene and acrylate esters production and as a column antifoulant.

#### Storage and Shelf Life

Store Santoflex 6PPD pastilles in single stacked pallets in a cool, dry, well-ventilated area, avoiding exposure of the packaged product to direct sunlight. Double stacking of palletized material and/or exceeding 35°C can result in unusual compaction of product.

The shelf life of Santoflex 6PPD 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 Flexsys office and should be consulted before handling this product.

#### Comments

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

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