

# Dusantox<sup>®</sup> SPPD

**Chemical Name:** 1,4-benzenediamine-N-( $\alpha$ -methylbenzyl)-N'-phenyl

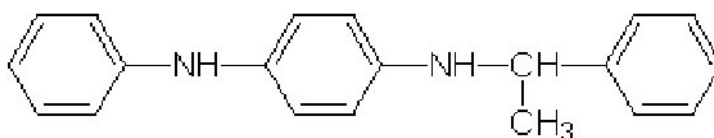
**Other Names:** N-( $\alpha$ -methylbenzyl)-N'-phenyl-p-phenylenediamine  
N-phenyl-N'-1-phenylethyl-1,4-phenylenediamine

**CAS Number:** 2830-40-2

**Empirical Formula:** C<sub>20</sub>H<sub>20</sub>N<sub>2</sub>

**Relative Molecular Weight:** 288.39

**Structural Formula:**



**Physical Form:** Brown to violet pastilles.

**Technical Parameters:**

Active substance content	min. 96.0 % by weight
Melting point	min. 80 °C
Volatiles (3 h/70 °C)	max. 0.4 % by weight
Ash	max. 0.1 % by weight
Specific gravity (at 20 °C)	1,210 kg.m <sup>-3</sup>

**Solubility:**

Dusantox<sup>®</sup> SPPD is well soluble in acetone and alcohols. Insoluble in water.

**Application:**

Dusantox<sup>®</sup> SPPD is one of the effective antidegradants of the paraphenylenediamine type for rubber goods. It acts as an effective antiozonant and antioxidant with a distinct long-term effect, giving vulcanizates high resistance to atmospheric and thermooxidative ageing. Substantially improves resistance of vulcanizates to dynamic fatigue and suppresses negative impact of rubber poisons. It provides good protection from ozone effects under both static and dynamic conditions. For static and combined (static and dynamic) stress conditions of vulcanizates it is possible further to increase ozone resistance by adding a suitable microwax. Dusantox<sup>®</sup> SPPD is effective in vulcanizates based on NR, IR, SBR, BR, NBR, CR and their combinations. When compared with Dusantox<sup>®</sup> 6PPD and Dusantox<sup>®</sup> IPPD, Dusantox<sup>®</sup> SPPD is characterized by lower mobility in the vulcanizate, what results in distinctively lower volatility and washingout. The protective effect of Dusantox<sup>®</sup> SPPD manifests itself in vulcanizates mostly in a later stage of exploitation, so it is recommended to use it in combination with Dusantox<sup>®</sup> 6PPD, or IPPD. To achieve further increase of protective effects, it is recommended to add antioxidants of the cumylated diphenylamine type (e. g. Dusantox<sup>®</sup> 86) or phenyl- $\alpha$ -naphthylamine, imidazoles and TMQ.

**Packaging and Transportation:**

The finalized product will be packed and transported in dark multilayer PE-coated paper bags on pallets in trucks, in containers to abroad. There is a 12-month guarantee starting on the date of production for original undamaged packages

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The data give are only of an informative character and are not complete. Further information can be obtained at:



**Producer:**

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