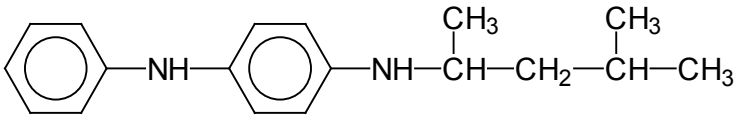
# Dusantox® 6PPD

**Chemical Name:** N-(1,3-dimethylbutyl)-N'-phenyl-p-phenylenediamine

**Empirical Formula:** $C_{18}H_{24}N_2$

**Molecular Weight:** 268.4

**Structure Formula:**



**Physical Form:** Brown to violet pastilles. It is a low-viscous liquid at temperatures above 50 °C.

**Technical Parameters:**

| | |
|---|---|
| Active substance content | min. 97.0 % by weight |
| Melting point range | 44 - 50 °C |
| Volatiles (3h/70 °C) | max. 0.4 % by weight |
| Ash (at 750 °C) | max. 0.1 % by weight |
| Kinematic viscosity (at 60 °C) | max. 50.0 $mm^2.s^{-1}$ |
| Specific gravity | 1,056 $kg.m^{-3}$ |
| Bulk density of pastilles | 560 - 610 $kg.m^{-3}$ |

**Solubility:**
Dusantox® 6PPD is well soluble in organic solvents and rubbers. Insoluble in hexane, petrol and water.

**Application:**
Dusantox® 6PPD is one of the most effective commercial antidegradants available for rubber and other elastomers. It acts as an effective long-term antiozonant and antioxidant giving vulcanizates high resistance against atmospheric, thermooxidative and oxidative ageing. It improves the flex fatigue resistance significantly and suppresses the effects of rubber poisons. Dusantox® 6PPD provides very good protection against ozone in static as well as in dynamic conditions. It is possible to improve more the ozone resistance of vulcanizates under both static and combined (dynamic and static) conditions by addition of suitable microwaxes. Dusantox® 6PPD is effective in NR, IR, SBR, BR, NBR, CR and in compounds based on their combinations. In order to reach higher protection levels of vulcanizates it is recommended to use Dusantox® 6PPD in combination with Dusantox® 86 (cumylated diphenylamine) or other antioxidants of phenylnaphthylamine, imidazole and TMQ type. Dusantox® 6PPD is less volatile and extractable by water than Dusantox® IPPD. It causes expressive colouring and contact staining of vulcanizates.

**Packaging and Storage:**
Dusantox® 6PPD pastilled is packed in multilayer PE-coated paper bags of 25 kg net, with valve closure. It is possible to pack it to big-bags of 500-1,200 kg weight. The product should be stored/transported in dry and covered places/vehicles at temperatures up to 35 °C. Do not expose to direct solar radiation. Storage life in undamaged original packaging is two years under the observation of storage conditions. Dusantox® 6PPD melt should be delivered in steel barrels of 200 l volume or in heated tank trucks. Keep melt of product away from air during transporting and storing. Recommended storage life at 60 °C is max. 1 month.



**0106**

DUSLO

**Producer:**
Duslo, a. s.
Administratívna budova ev. č. 1236
927 03 Šaľa
Slovak republic

**Sales contact:**
Duslo, a. s.
Nobelova 34
836 05 Bratislava
Slovak republic

Tel.: +421 2 4951 2762, +421 2 4951 2757
Fax: +421 2 4951 3263
E-mail: rubber@duslo.sk
Internet: http://www.duslo.sk/