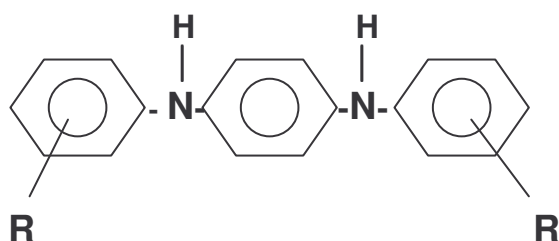


**SPECIFICATION DOX1-012005****Antiozonant DOX – 1**

No CAS 68953-84-4
No EINECS 273-227-8

1. Chemical description:

Mixed diaryl-p-phenylenediamines

 $R = H \text{ or } CH_3$ **2. Specification values :**

Property	Specification	Analysis method
Appearance and form	steel-brown granules	visual
Melting point, °C	88 ÷ 105	ASTM D 1519
Drying loss at 60° C, %	Max. 0.5	ASTM D 4571
Iron content, ppm	Max. 750	DJCHEM-214/04
Active components, %	Total min. 85	DJCHEM-210/04 (GC)
Diphenylparaphenylenediamine, %	19 ÷ 30	DJCHEM-210/04 (GC)
Ditolylparaphenylenediamine, %	15 ÷ 26	DJCHEM-210/04 (GC)
Phenyltolylparaphenylenediamine, %	40 ÷ 46	DJCHEM-210/04 (GC)

Date: 03-01-2005

3. APPLICATIONS

- ANTIOXIDANT DOX – 1 is used in tyres and general rubber goods such as hoses, conveyor belts, o-rings, seals, gaskets and wiper blades to confer long term protection.
- ANTIOXIDANT DOX – 1 is a persistent antiozonant, powerful antioxidant and antiflex cracking agent for many natural and synthetic elastomer compounds. It is a particularly powerful antiozonant for polychloroprene.
- ANTIOXIDANT DOX – 1, when compared with other p-phenylenediamines, has the lowest effect on the scorch and cure rate of compounds based on natural rubber, SBR, polubutadiene and polychloroprene.
- ANTIOXIDANT DOX – 1, is the least staining of the commercially available p-phenylenediamines.

4. SAFETY AND HANDLING

- According to EEC regulations, practically non harmful by ingestion.
- Acute oral toxicity: LD 50 (rat) 4 g/kg
- Non skin or eye irritant under normal industrial conditions.
- No cases of skin sensitisation in humans have been reported.
- ANTIOXIDANT DOX – 1 may also be used in articles intended for use in contact with food accordance with FDA regulations 175.105 (Adhesives) and 177.2600 (Rubber Articles).
- Transport regulations: ANTIOXIDANT DOX – 1 is classified as non-hazardous solid.

5. PACKAGING

- Bags 25 kg or hobs 1000 kg.
- Storage life: 2 years minimum if stored unopened in original packing.