

Oxoflex[®] DPA Pastilles

Manufacturer: Sovereign Chemical Company
 Classification: Diphenylamine antioxidant and anti-flex agent
 Chemical Name: 90% 4,4'-dicumyldiphenylamine and 10% 4-cumyldiphenylamine

Specification Properties	Value	Test Method
Acetone Insolubles, %	0.1 maximum	SCC-110
Ash Content, %	0.1 maximum	SCC-111
Heat Loss @70°C, %	0.5 maximum	SCC-109
Melting Point, °C	85-95	SCC-108
Typical Properties	Value	Test Method
Physical Form	Light-violet to gray-violet pastilles	Visual
Specific Gravity	1.14	Typical

> APPLICATIONS

Uses: Especially suited for use in tires, belts, hoses, cables and mechanical rubber goods. Also as a stabilizer for plastics, lubricants and oils.

Protection: An alkylated diphenylamine that is a very effective antioxidant that provides long term protection. It also provides protection against flex cracking, metal ion degradation and heat aging. It is a weak antiozonant in neoprene rubber.

Polymers: All synthetic and natural rubbers. Especially good in polyisoprene, natural rubber, neoprene, and nitrile rubbers.

Synergism: Synergistic with phenolic antioxidants, phosphite antioxidants, p-phenylenediamines, MMBI and microcrystalline/paraffin waxes.

Staining: Non-staining and only very slightly dis-coloring in sunlight. Non-staining and non-discoloring upon heat aging.

Cure Effect: Non-activating on the cure.

Recommended Dosage:

As an Anti-Flex Agent: 1.0-2.0 phr
 As an Antioxidant: 1.0-2.5 phr in a carbon-black filled compound
 0.5-1.5 phr in a non-black compound with phenolic antioxidant (1-1.5 phr)
 1.0-3.5 phr in CR
 For Heat Resistance: 1.-4.0 phr in combination with MMBI
 As a Metal Antidegradant: 1.0-2.0 phr
 As a Polymer Stabilizer: In polyamides 0.10-1.00 % weight
 In polyolefins 0.05-0.5 weight
 In oils 0.10-1.0 % weight

> FDA REGULATIONS

Adhesive component, indirect food additive 21 CFR 175.105(C)(5)

Antioxidant and/or stabilizer for polymers 21 CFR 178.2010(b)

Food contact surface component 21 CFR 177.1590(b)

Resinous and polymeric coating 21 CFR 175.300(b)(3)

> PACKAGING AND STORAGE

Packaging: 25 kg (55.1 lb.) bags.

Shelf Life: 2 years from date of manufacture if stored as indicated below.

Storage: Store in unopened original packaging in a cool dry place away from foodstuffs, oxidants and acids.

Specification Date: July 16, 2001 (Supersedes November 30, 1999)