

# Sovchem<sup>®</sup> DPG Oiled Powder

Manufacturer: Sovereign Chemical Company  
 Classification: Guanidine Accelerator  
 CA Nomenclature: Guanidine, N, N' – diphenyl  
 Chemical Synonyms: Diphenylguanidine

Specification Properties	Value	Test Method
Ash Content, % @900°C	0.4 maximum	ASTM D4574
Heat Loss, % @60°C	0.3 maximum	ASTM D4571
Melting Point (Final), °C	150 maximum	ASTM D1519
Melting Point (Initial), °C	144 minimum	ASTM D1519
Oil Content, %	1-2	In Process
Purity, %	96 minimum	ASTM D5054
Sieve Residue 100 mesh, %	0.10 maximum	ASTM D4570
Typical Properties	Value	Test Method
Physical Form	White to gray powder	Visual
Specific Gravity	1.13-1.23	Typical

## > APPLICATIONS

**Uses:** Thiazole and sulfenamide booster, accelerator. Non-nitrosamine generating. DPG can replace TMTD in many applications. Excellent accelerator for curing thick rubber articles.

**Polymers:** Natural rubber and most synthetic rubbers.

**Synergism:** Synergistic effect with thiazoles, sulfenamides and thiurams.

**Cure Effect:** Excellent secondary accelerator for boosting thiazoles and sulfenamides. Slow curing primary accelerator for natural rubber but too slow for synthetic rubbers. DPG has less scorch safety than DOTG. Need slightly more DPG than DOTG to get the same state of cure.

**Crosslink Type:** DPG produces predominately poly-sulfidic crosslinks which maximizes the tear strength of its vulcanizates.

## > FDA REGULATIONS

177.2600 Rubber articles for repeated use - Limitation 1.5% maximum

## > PACKAGING AND STORAGE

**Packaging:** 20 kg (44.09 lb.) bags.

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

**Storage:** Store in unopened original packages in a cool dry place.

**Specification Date:** September 23, 2004 (Supersedes November 20, 2003)