

## Sovchem<sup>®</sup> DPG Granule

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       | 0.3 maximum            | ASTM D4574  |
| Heat Loss, % @60°C          | 0.3 maximum            | ASTM D4571  |
| Melting Point (Final), °C   | 150 maximum            | ASTM D1519  |
| Melting Point (Initial), °C | 145 minimum            | ASTM D1519  |
| Purity, %                   | 96 minimum             | ASTM D5054  |
| Typical Properties          | Value                  | Test Method |
| Physical Form               | White to gray granules | Visual      |
| Specific Gravity            | 1.18                   | Typical     |

### > APPLICATIONS

**Uses:** Thiazole and sulfenamide booster, accelerator. Non-nitrosamine generating. 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.

### > 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:** February 16, 2011 (Supersedes September 23, 2004)