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**RUBBER CHEMICALS
 -ACCELERATORS-
 GUANIDINES**

**ACCELERATOR DPG
 (Diphenyl Guanidine)**

PRODUCT DESCRIPTION:

Accelerator DPG is useful as an accelerator/activator for natural rubber, SBR and NBR. It activates accelerators such as MBT, MBTS and sulfenamides. It is a strong secondary for CBTS, BBTS, OBTS, MBT and MBTS. Such cure systems have outstanding flex properties. DPG requires the use of zinc oxide and fatty acids. Fatty acids in excess of 1% decrease tensile and tear strength properties. DPG does give satisfactory processing safety and storage stability to rubber compounds. In light colored goods, it causes a brown discoloration and is not recommended for use in compounds that have contact with food. Vulcanizate properties of stress (modulus) are high; however, elongation decreases with an increase in cure time. For best aging results, an antioxidant is required. Suggested concentrations of DPG in combination with zinc oxide, stearic acid, and sulfur are as follows:

Natural Rubber	0.10- 0.50 phr with sulfenamides or MBTS
SBR	0.20 - 0.75 phr with sulfenamides, MBTS or MBT
NBR	0.20 - 0.50 phr with CBTS, MBTS

TYPICAL PROPERTIES:

Appearance.....	non-dusting white powder or pellets
Odor	weak with a bitter taste
Specific Gravity	1.10-1.19
Melting Point.....	143°C minimum
Ash Content.....	0.4% maximum
Solubility	Acetone, methylene chloride, ethyl acetate, ethyl alcohol and benzene. Insoluble in gasoline and water.
Storage Stability.....	Excellent
Dispersion	Very Good

CHEMICAL DISPERSIONS:

Accelerator DPG is also available as Akroform[®] DPG-80/EPR/P. This polymeric masterbatch contains 80% Accelerator DPG and has a specific gravity of 1.12. Polymer bound or encapsulated dispersions are a proven means of upgrading plant safety, efficiency, quality and raw material control.

wol - 6/10, t-dpg

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