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**CHEMICAL DISPERSIONS  
 -MASTERBATCHES-**

**AKROFORM<sup>®</sup> VS-50/EPR/P  
 (Zinc Salt of Dibutyl Phosphorodithioate)**

**PRODUCT DESCRIPTION:**

Akroform VS-50/EPR/P is a non-staining and non-blooming accelerator for EPDM compounds and other sulfur curable elastomers dispersion in a rubber matrix. It offers fair processing safety, medium fast curing characteristics, and is suitable for low sulfur cures. Powerful acceleration and a high degree of cross-linking can be obtained in conjunction with secondary accelerators.

Levels of 2-4 phr VS-50/EPR are typical. For highly loaded stocks up to 5 phr may be used with 1.5 - 2.5 phr of sulfur. For faster rates of cure and higher degrees of cross-linking secondary accelerators, such as thiazoles, dithiocarbamates and thiurams must be added. It is important that levels are kept below the concentration causing blooming of the vulcanizates. A typical cure would be:

Sulfur	1.0 phr
VS-50	4.0 phr
BBTS	2.0 phr
TM/ETD	1.0 phr

Accelerator VS yields fully cured compounds even without the use of secondary accelerators. The physical properties of the vulcanizates are comparable to those obtained with the blooming ultra-accelerator combinations. This is of particular value in hose and belt applications wherein normal amine based accelerators may have a deleterious effect on polyester yarn. VS is also valuable as a non-nitrosamine accelerator. Replace TM/ETD in the above formula with TBzTD and you have a safe nitrosamine compound. ZBED can also be used to help accelerate the cure.

**TYPICAL PROPERTIES**

Specific Gravity: .....	1.24)
Appearance: .....	lt. blue-gray ¼ inch cylindrical pellets
Activity, %: .....	50
Solubility:.....	soluble in Naphtha, Toluene, Mineral oil and Alcohol

**ADVANTAGES:**

Polymer bound or encapsulated dispersions are a proven means of upgrading plant safety, efficiency, quality & raw material control.

Akrochem polymer bound or encapsulated chemical dispersions eliminate any irritating dust, as well as other potential hazards in handling powders in the plant. The physical form is easy to handle and weigh accurately. With a dispersion, better uniformity of the mix at lower processing temperatures is possible.

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