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ISO 9001-2000
REGISTERED

A-1 THIOCARBANILIDE ACCELERATOR

A-1 Thiocarbanilide (1,3-Diphenyl-2-Thiourea, N,N'-Diphenylthiourea) is a fast curing accelerator commonly used in tire repair stock formulations. It can also be used as an accelerator in polychloroprene latex and dry polychloroprene compounds. A-1 also has special application in sponge EPDM products.

TYPICAL PHYSICAL AND CHEMICAL PROPERTIES

Appearance	White to Gray Powder
Melting Point	148°C
Specific Gravity	1.3
Screen, on 63 Micron	0.02%

A-1 is essentially non-discoloring and may be used in light colored compounds. It has good storage stability, but avoid extremes of temperature and humidity. The recommended shelf life is one year.

COMPOUNDING INFORMATION:

In black filled Mercaptan modified polychloroprene, 0.7 phr A-1 Accelerator with 5-phr zinc oxide gives good properties with reasonable scorch safety. Addition of 0.4 phr of Vocol® ZBPD accelerator to this system will give a faster cure but with a decrease in processing safety.

In clay filled Mercaptan modified polychloroprene, 1.0 phr A-1 with 5-phr zinc oxide gives a good balance of properties. It is recommended for the accelerator of polychloroprene latex at a loading of about 0.5 phr. A 50% dispersion may be prepared for latex application by ball milling the following formulation for 48 hours:

<u>Ingredients:</u>	<u>Parts by Weight:</u>
A-1	50.0
Tamal N	1.5
Bentonite Clay	0.5
Ammonium Caseinate 10% (Aquamix 103)	10.0
Water	38.0
	100.0

In combination with other accelerators, A-1 is used 1.5 - 3.0 phr in extruded, closed cell EPDM cellular products.

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