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RUBBER CHEMICALS
-ACCELERATORS-
THIOUREAS

ACCELERATOR THIO #1
(N,N' - DIPHENYLTHIOUREA)

PRODUCT DESCRIPTION:

Accelerator Thio #1 is a non-discoloring accelerator for use in Neoprene (CR), Natural Rubber, EPDM and many other elastomers. Thio #1 provides rapid acceleration and can be used in latex and cement applications.

TYPICAL PROPERTIES:

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| Appearance | Off-white powder |
| Specific Gravity | 1.20 |
| Melt Point | 148°C |
| Purity | 98% |
| Ash | 0.5 |
| Moisture Content. | 0.7 |
| Fineness (100 Mesh), % Retained | 0.1 |
| Solubility | Soluble in acetone. Slightly soluble in alcohol, ether, toluene, naphtha, carbon tetra-chloride. |

APPLICATION:

Thio #1 is a very effective Neoprene (CR) rubber accelerator providing fast, safe cures with flat curing plateaus (no marching modulus). It also functions as an accelerator for compounds based on Neoprene (CR) latex, Natural Rubber latex and cements. Thio #1 activates thiazole accelerators and can be used in light colored compounds since it is essentially non-discoloring. It can also be used in EPDM sponge applications. In Neoprene, typical dosages range from 0.5 to 1.5 phr for carbon black and mineral loaded compounds. Recommended Neoprene (CR) latex dosages start at 0.5 phr. In extruded EPDM closed cell sponge application Thio #1 can be used at a level of 1.5 to 3.0 phr. Thio #1 is approved for use in rubber in repeated contact with foodstuffs under CFR 21, Regulation 177.2600, Accelerators (1,3-Diphenyl-2-thiourea) not to exceed 1.5% by weight.

CHEMICAL DISPERSIONS:

Accelerator Thio #1 is also available as Akroform[®] Thio #1-75/EPR/P. This polymeric masterbatch contains 75% Accelerator Thio #1 and has a specific gravity of 1.17. Polymer bound or encapsulated dispersions are a proven means of upgrading plant safety, efficiency, quality and raw material control.

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