

CHEM TECHNOLOGIES, LTD.

Beyond the obvious from innovation to application

14875 Bonner Drive Middlefield, OH 44062 Phone: 440-632-9311 Fax: 440-632-9578

CT(CR)-90 and CT(TR)-90

Low Cost Performance Equivalents to TDEC, TDEC Dispersions and TDEC Replacement Dispersions

Product Description / Advantages:

CT(CR)-90 and CT(TR)-90 are 90% active dust suppressed powders of proprietary blends of rubber accelerators. The binders are based on hydrotreated naphthenic oil. The dust suppressed powder form is designed to offer the following advantages:

- Disperses easily and quickly
- Provides better dispersion of the active ingredient throughout the batch
- Reduces loss associated with dusty powders
- Can be preweighed in batch inclusive bags to specific customer weights
- Can be customized with alternate binder system oils

Application / Recommendations:

TDEC is used extensively in EPDM, butyl and other slow curing polymers as an accelerator to increase cure speed. CT(CR)-90 should be evaluated as replacements on an activity basis for tellurium diethyldithiocarbamate (TDEC) powder and as part for part replacements for TDEC dispersions. CT(TR)-90 should be used at twice the level of TDEC.

Both products have been found to work well in both sponge and dense applications. Depending on the cure system, substitution with our lower cost performance equivalents can provide similar rheology, blow properties, and may even offer less reversion than TDEC. CT(TR)-90 has been found acceptable in use in light colored rubber compounds.

Based on our testing, CT(CR)-90 tends to be a little faster in EPDM than TDEC. This can be adjusted for by using slightly less CT(CR)-90, or by using CT(TR)-90 which gives very similar cure properties to TDEC in EPDM. Studies of CT(CR)-90 in butyl rubber show cure properties equal to that of TDEC. CT(CR)-90 does tend to be faster than CT(TR)-90 in most polymers.

A complete technical report is available upon request (CTR-05001).

Active Ingredient:

Proprietary Blend of Rubber Accelerators

Typical Properties: CAS #'s

Proprietary Accelerators $90 \pm 1\%$ Mixture

Specific Gravity 1.57 for *CT(CR)-90*

1.78 for *CT(TR)-90*

Appearance:

Form: Dust Suppressed Powder

Color: Yellow for CT(CR)-90

Beige for *CT(TR)-90*

Odor: Slight Characteristic Odor

Packaging:

Standard packaging is sixty (60) pounds per polyethylene lined cardboard carton. Other packaging options are available upon request.

Handling and storage:

Components of CT(CR)-90 and CT(TR)-90 are skin, eye and respiratory irritants, toxic by ingestion and may cause alcohol intolerance (Antabuse Effect). Repeated skin contact may cause dermatitis and sensitization. Store in a cool, dry place. Maintain regular stock rotational practices. Partially used containers should be kept closed to minimize exposure and avoid contamination. Avoid physical contact. Wash with soap and water thoroughly after handling. If contacted in the eye, flush with water for 15 minutes and consult a physician. Please refer to the MSDS for additional information.

For Additional Information:

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