

# Chartwell C-505.1/ 2H

## TECHNICAL DATA

## ADHESION PROMOTERS

### GENERAL DESCRIPTION:

An increased active matter mercapto functional organic adhesion promoter synthesized using a STABILIZED BIMETAL PRECURSOR. The product is supplied in propylene glycol to aid in rapid dispersion and solubilization of the active component in polymer matrices.

### PHYSICAL PROPERTIES:

Physical form	Clear liquid
Color	Pale yellow
Metal content (Total %)	9.1 - 10.3
Complexed organics	15.9 - 16.3
Specific gravity (g/ml)	1.30
pH (2% soln)	3.9
Active matter (wt %)	46.0
Solvent	propylene glycol
Organofunctionality	mercapto

### APPLICATION:

**(1) Elastomers:** Recommended for mineral-filled (silica, etc.) or carbon black pigmented sulfur cured elastomers at 0.5-1.0 phr to improve physical properties tensile, tear and abrasion resistance.

- **Chartwell C-505.1/ 2H** also improves vulcanization of all sulfur cured elastomers. Incorporation during compounding improves adhesion of other rubber, metal and synthetic materials to the molded rubber surface.

**(2) Adhesives/ Coatings/ Inks:** Recommended for epoxy (esp. dicyanamide cured) and urethane to enhance adhesion to metals, plastics, and elastomers. Increased T-peel strength. Improved resistance to moisture, heat, and corrosive environments.

### PROCEDURE:

- 1. Rubber:** 0.5 - 1.5 phr, add directly onto silica or other filler and compound in a Banbury mixer
- 2. Coatings/ Inks:** See Bulletin "Use Procedure Recommendations." (Requires high speed dispersion)
  - **Two component epoxies:** Add to Resin (A Side); level is 0.5 - 1.0 wt per cent of total binder (combined resin + hardener).
  - **Two component urethanes:** Add to polyol (B side); level is 0.5 - 1.0 wt per cent of total binder (combined isocyanate + polyol).
- 3. Adhesives:** 0.5 - 1.0 phr, post add recommended under agitation. (Requires high speed dispersion)
- 4. Plastics:** 0.5 - 1.0 phf (parts per hundred filler; recommend pretreat of pigments/ fillers in a Henschel or similar mixer and subsequently compound with resin. For high surface area pigments/ fillers, ie fumed silica, carbon black, phthalo, and similar.

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