ADHESION PROMOTERS

GENERAL DESCRIPTION: A methacrylato functional organic adhesion promoter synthesized using a STABILIZED BIMETAL PRECURSOR. The product is supplied in a solvent carrier consisting of propylene glycol to aid in rapid dispersion and solubilization of the active component in polymer matrices.

PHYSICAL PROPERTIES:

Physical form Color Metal content (Total %) Complexed organics Specific gravity (g/ml) pH (2% soln) Active matter (wt %) Solvent Organofunctionality Clear liquid pale yellow 5.2 - 5.9 9.1 - 9.3 1.15 3.90 23.0 propylene glycol methacrylato

APPLICATION:

(1) Coatings: Recommended for enhancing adhesion of UV/ EB cured coatings, ie acrylic, etc. to metal surfaces with resultant reduction in corrosion. Enhances adhesion to many plastic surfaces (oxygen containing polymers only) or treated polyolefins.

(2) Adhesives/ Sealants: Recommended for acrylate/ methacrylate adhesives and sealants for improved adhesion to metals, concrete, wood, many plastics (oxygen containing polymers only) and ceramics. Improved T-peel strength and resistance to moisture. Not recommended for adhesion to glass.

(3) Rubber: Improved physical properties in mineral filled silicone, EPDM and other peroxide cured rubbers.

(4) Plastics: Improved physical properties in free radical cured resins, ie polyesters, acrylics, and polyurethanes.

PROCEDURE: HIGH SHEAR MIXING NECESSARY IN ALL SOLVENT-BORNE SYSTEMS

1. Coatings/ Inks: Optimum performance is achieved when added directly to the grind stage resin and high shear mixed for 15 mins before adding other components. **Must be high shear mixed with a Cowles type mixer. Milling alone is not sufficient.**

2. Adhesives: 1.0 - 2.0 phr, post add recommended under agitation.

3. Plastics: 1.0 - 2.0 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.

4. Rubber: 1.0 - 3.0 phr, add directly onto silica or other filler and compound in a Banbury mixer.