

Cola Mer HMP

Monomer for Emulsion Polymerization

DESCRIPTION Hydroxyethyl Methacrylate Phosphate

CAS 52628-03-2

LISTINGS Canada (DSL); US (TSCA); Australia (AICS); Korea (KECI); China (IECSC);

Philippines (PICCS); New Zealand (NZIOC); Taiwan (TCSI)

Cola®Mer HMP is a functional monomer used in emulsion polymerization systems, paint and coatings, adhesives, plastics, and composites. When blended into a polymer, Cola®Mer HMP promotes adhesion to substrates and corrosion resistance.

Cola®Mer HMP improves pigment dispersion and provides antistatic properties to polymers.

BENEFITS

- · Adhesion promotion
- Corrosion inhibition
- Surface preparation
- Static charge reduction
- Emulsion stabilization
- · Low color preferred in optical applications
- Flame retardant

APPLICATIONS

- · Adhesives and plastics
- Paints and coatings
- Composites and prepregs
- UV inkjet inks
- Gel coats
- Fibers
- Dentin treatment to improve bonding of adhesives

SPECIFICATIONS

Appearance	Clear Liquid
AV1, mg KOH/g	171 – 187
AV2, mg KOH/g	266 – 293
% H3PO4	4.0 MAX
% Moisture	0.25 MAX
Color, APHA	300 MAX



STORAGE / HANDLING

Cola®Mer HMP should be stored in original sealed containers and kept at temperatures below 95°F (35°C). Product is stable under recommended storage conditions. Keep product away from heat and sources of ignition. Avoid exposure to UV light or loss of dissolved oxygen.

Shipped in 55 gallon poly drums (net weight 525 lb/238 kg). Typical shelf life is 12 months from date of manufacture. Safety Data Sheets may be found online at *www.colonialchem.com*.

ADDITIONAL TESTING

Adhesion Improvement

Cola®Mer HMP improves metal adhesion compared to a methacrylic acid (MAA) containing coating.





ASTM D3359, on CRS Panels* Stryrene-acrylic Coatings; <50 g/L VOC $PVC = 23\%, Tg = 5^{\circ}C$ Coating Thickness 2 mil DFT

2% Cola®Mer HMP

2% MAA

Chemical Resistance Test

Cola®Mer HMP improves chemical resistance compared to an MAA-containing coating.





ASTM D2792, modified, solvent & fuel resistance of traffic paints. The cured coatings* were submerged into acetone baths and sealed.

Styrene-acrylic coating; 185 g/L VOC, PVC = 18%, Tq = 40oC

Coating thickness 6 mil wet, 2 mil dry. 3 hour partial submersion

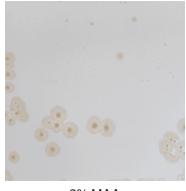
2% Cola®Mer HMP

2% MAA

Flash Rust Test

Cola®Mer HMP improves corrosion protection compared to an MAA-containing coating.





Stryrene-acrylic Coatings; <50 g/L VOC $PVC = 23\%, Tq = 5^{\circ}C$ Coating Thickness 2 mil DFT*

2% Cola®Mer HMP

2% MAA

^{*}High gloss white DTM topcoat was applied to cold-rolled steel and dried per ASTM standard.

