

# Eastman ADVANTIS™ 510W

chlorine-free waterborne adhesion promoter

**EASTMAN**

## Eastman Advantis™ 510W chlorine-free waterborne adhesion promoter

Eastman Advantis™ 510W is our next-generation waterborne product for adhesion to modified polypropylene substrates. Advantis™ 510W is chlorine free and APEO free.

As a blend-in additive for waterborne primers and/or waterborne basecoats, Eastman Advantis™ 510W is a versatile, effective adhesion promoter for automotive bumper applications. This chlorine-free, waterborne product can be used as a wash primer and is suitable as an adhesion promoter for applications beyond automotive.

Eastman Advantis™ 510W provides excellent adhesion on non-flame treated EPDM rubber-modified polypropylene substrates.



### Key advantages of Eastman Advantis™ 510W

- ◆ *Green—waterborne, solvent free, APEO and halogen free* to provide for VOC-compliant coatings to meet strict environmental regulations
- ◆ *Excellent compatibility* with a variety of waterborne resins to allow for maximum formulation latitude
- ◆ *Excellent adhesion* (substrate and intercoat) under a variety of extreme test conditions

### Applications for Eastman Advantis™ 510W chlorine-free waterborne adhesion promoter

Eastman Advantis™ 510W chlorine-free, waterborne adhesion promoter is the active component for adhesion of coatings to modified polypropylene substrates and other plastics. Market applications include

- ◆ Automotive OEM
- ◆ Automotive refinish
- ◆ Truck/bus/commercial vehicles
- ◆ Coatings for plastics

## Adhesion performance of Eastman Advantis™ 510W chlorine-free waterborne adhesion promoter in the high-pressure water-jet test

### ◆ Substrate

SABIC PP108MF97 test panels, non-flame treated

### ◆ Adhesion promoters

Eastman Advantis™ 510W chlorine-free waterborne adhesion promoter  
WB CPO control

### ◆ Topcoats

Three-coat system (wash primer<sup>1</sup>; solvent-based base coat; solvent-based clear coat)  
Two-coat system (waterborne base coat; solventborne clear coat)

### ◆ Coating evaluation

High-pressure water-jet test Walter LTA1 with the following test parameters:

#### PSA test parameters

Pressure	70 bar
Temperature	70°C
Distance nozzle/substrate	10 cm
Duration	60 sec
Surface preparation	Solvent degrease
Nozzle type	25065 PMEG SS



High-pressure water-jet test

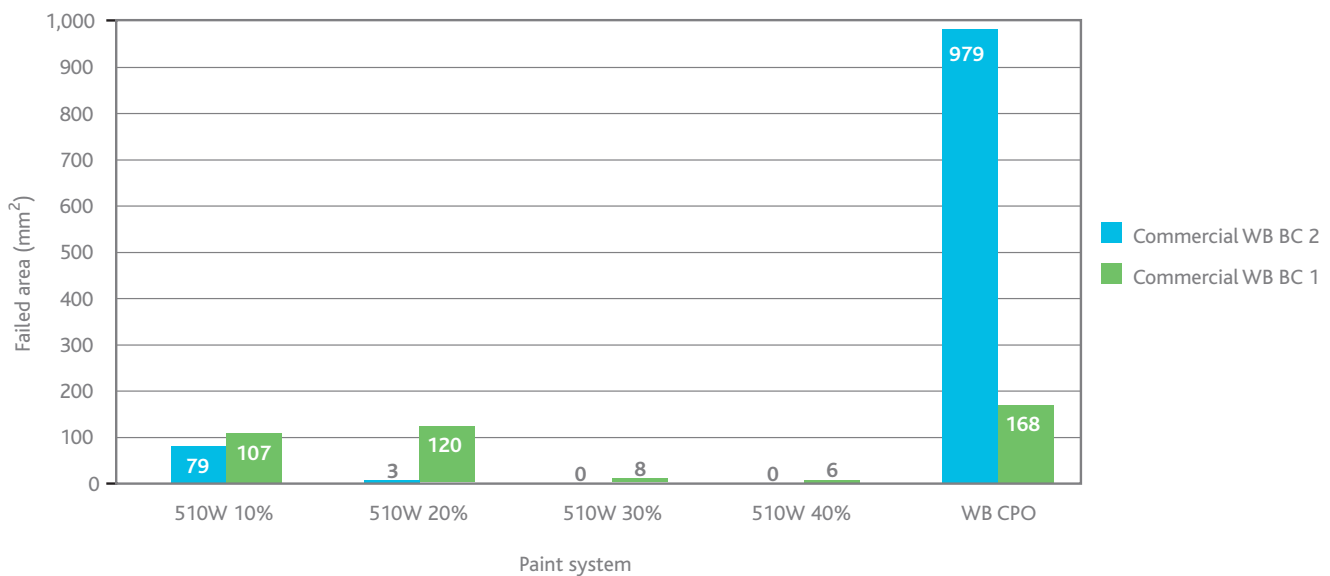


High-pressure water-jet test equipment Walter LTA1

## Results

### High-pressure water-jet test

Eastman Advantis™ 510W blended into commercial waterborne base coats  
(solids on base-coat solids)



Eastman Advantis™ 510W blended into commercial waterborne base coats — area of adhesion failure in mm<sup>2</sup>.

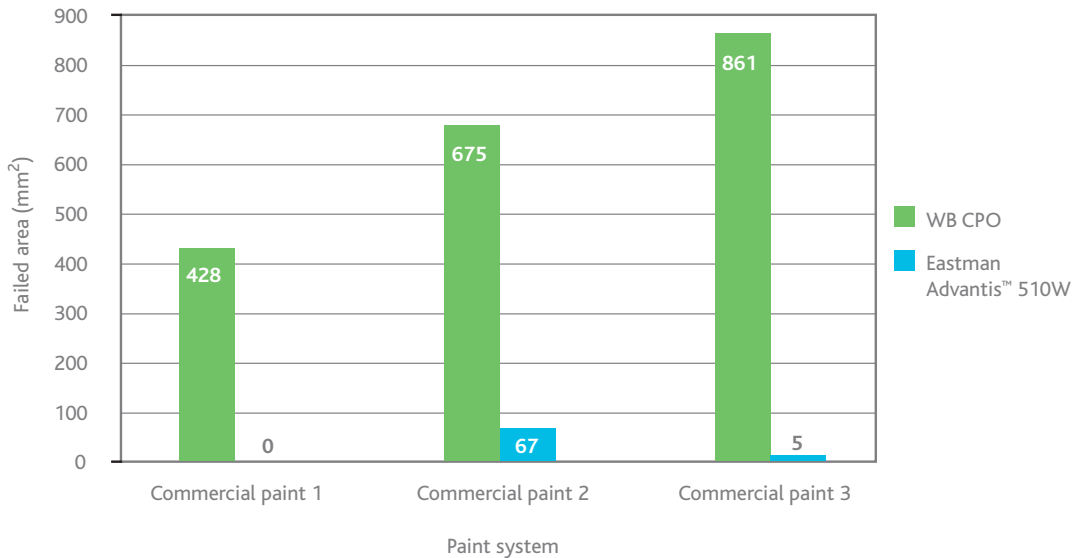
<sup>1</sup>Both Eastman Advantis™ 510W and WB CPO thinned down to 10% resin solids.

# Eastman ADVANTIS™ 510W

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## High-pressure water-jet test (Kaercher)

Eastman Advantis™ 510W as wash primer top coated with a solvent-based base coat and a solvent-based clear coat



### Typical properties of Eastman Advantis™ 510W chlorine-free waterborne adhesion promoter

Property	Typical value, units
Appearance	Off-white milky liquid
Solids	24 wt %
pH @ 25°C	8
Neutralization	Amine
Stability	
Shelf life 1 year (RT)	No significant change
@ 40°C, 4 weeks	No significant change
Viscosity @ 25°C	< 75 cP
Water	76 wt %
Density	970 g/l (8.1 lbs/gal)
Particle size	0.03 microns
T <sub>g</sub>	< 0°C



The Eastman team is global, and  
we are just a phone call away.

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