

# 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

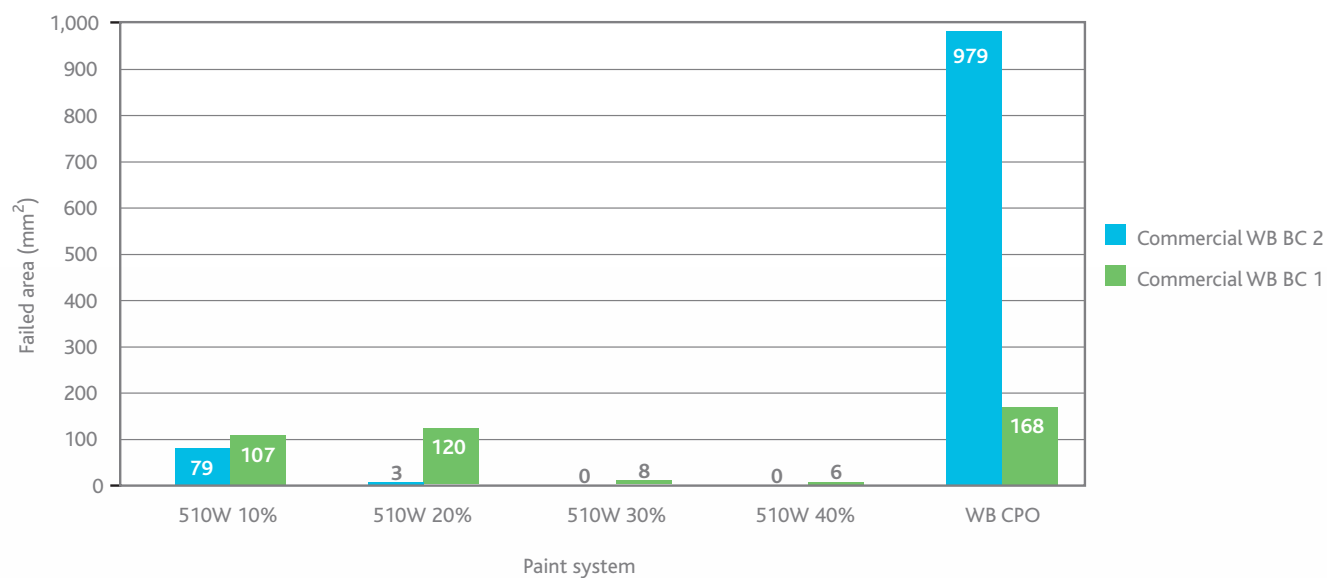


High-pressure water-jet test equipment Walter LTA1

## 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 mm².

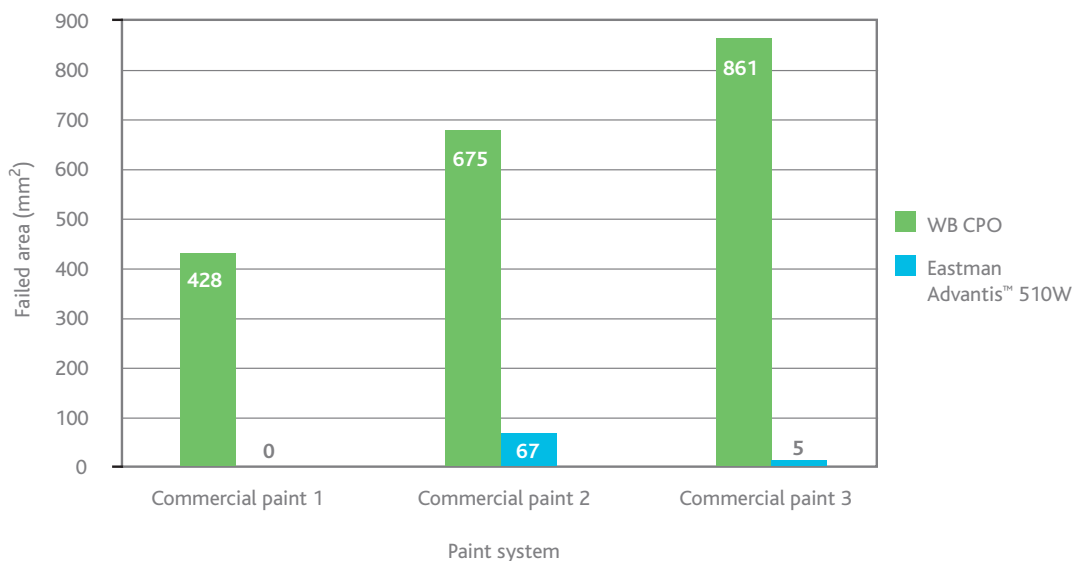
<sup>1</sup>Both Eastman Advantis™ 510W and WB CPO thinned down to 10% resin solids.

# Eastman ADVANTIS™ 510W

chlorine-free waterborne adhesion promoter

## 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.

**Eastman Chemical Company  
Corporate Headquarters**

P.O. Box 431  
Kingsport, TN 37662-5280 U.S.A.

Telephone:  
U.S.A. and Canada, 800-EASTMAN  
(800-327-8626)  
Other Locations, (1) 423-229-2000  
Fax: (1) 423-229-1193

**Eastman Chemical Latin America**

9155 South Dadeland Blvd.  
Suite 1116  
Miami, FL 33156 U.S.A.

Telephone: (1) 305-671-2800  
Fax: (1) 305-671-2805

**Eastman Chemical B.V.**

Fascinatio Boulevard 602-614  
2909 VA Capelle aan den IJssel  
The Netherlands

Telephone: (31) 10 2402 111  
Fax: (31) 10 2402 100

**Eastman (Shanghai) Chemical  
Commercial Company, Ltd. Jingan Branch**

1206, CITIC Square  
No. 1168 Nanjing Road (W)  
Shanghai 200041, P.R. China

Telephone: (86) 21 6120-8700  
Fax: (86) 21 5213-5255

**Eastman Chemical Japan, Ltd.**

AIG Aoyama Building 5F  
2-11-16 Minami Aoyama  
Minato-ku, Tokyo 107-0062 Japan

Telephone: (81) 3-3475-9510  
Fax: (81) 3-3475-9515

**Eastman Chemical Asia Pacific Pte. Ltd.**

#05-04 Winsland House  
3 Killiney Road  
Singapore 239519

Telephone: (65) 6831-3100  
Fax: (65) 6732-4930

[www.eastman.com](http://www.eastman.com)

**EASTMAN**

Material Safety Data Sheets providing safety precautions, that should be observed when handling and storing Eastman products, are available online or by request. You should obtain and review the available material safety information before handling any of these products. If any materials mentioned are not Eastman products, appropriate industrial hygiene and other safety precautions recommended by their manufacturers should be observed.

*Neither Eastman Chemical Company nor its marketing affiliates shall be responsible for the use of this information, or of any product, method or apparatus mentioned, and you must make your own determination of its suitability and completeness for your own use, for the protection of the environment and for the health and safety of your employees and purchasers of your products. NO WARRANTY IS MADE OF THE MERCHANTABILITY OR FITNESS OF ANY PRODUCT, AND NOTHING HEREIN WAIVES ANY OF THE SELLER'S CONDITIONS OF SALE.*

Advantis and Eastman are trademarks of  
Eastman Chemical Company.

All other brands are the property of their respective owners.

© Eastman Chemical Company, 2009.