



**ADVANCED POLYMER, INC.**

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## HARDLEN® EW-8511

HARDLEN EW-8511 is a solvent free, water-based binder/primer that provides strong adhesion to polypropylene and polypropylene/EPDM substrates. HARDLEN EW-8511 will provide a flexible coating with an excellent affinity for polyurethane based paint. When used as a primer on polypropylene, the applied topcoat will have a high degree of resistance to water and hydrocarbons.

### CHARACTERISTICS

- Superior adhesion to PP or PP/EPDM without pretreatment
- Excellent adhesion to topcoat paint such as polyurethane or polyester-melamine
- Tough, transparent film after coating and drying

### APPLICATION

The following is recommended for application:

- Wash surface of polypropylene substrate with IPA solution.
- Dilute HARDLEN EW-8511 with water if lower viscosity is required.
- Spray HARDLEN EW-8511 onto substrate (dry thickness  $\approx 6 \text{ g/m}^2$ ).  
Dry at 80°C for 10 minutes.
- Spray apply basecoat and clear coat, wet on wet, (basecoat dry thickness  $\approx 15 \text{ g/m}^2$  / clear coat dry thickness  $\approx 30 \text{ g/m}^2$ ).
- Bake at 100°C for 20 minutes; allow to stand at 25°C for 48 hours.

### PACKAGING

HARDLEN EW-8511 is available in 8 oz. samples.

### Advanced Polymer, Inc.

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**I want to know more!**

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### TYPICAL PROPERTIES

Appearance:	Milky tan emulsion
Base Resin:	Soft
Molecular Weight: (of base resin)	50,000
Resin Content:	30%
Chlorine Content:	17%
Viscosity (@ 25°C):	<100 cps
Particle Size:	<0.3 $\mu\text{m}$

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Revised July 7, 2010

## HARDLEN EW-8511

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### Section I Product Identity

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Product Name: HARDLEN EW-8511  
Chemical Name/Family: Modified Chlorinated polyolefin with Maleic Anhydride  
CAS#: Mixture  
24 Hour Emergency Number 800-424-9300  
24 Hour Chemtrec Number 800-424-9300

All ingredients are listed in EPA's TSCA list of chemical substances

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### Section II Hazardous Components/Composition Information

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<b>A. CHEMICAL</b>	Modified Chlorinated polyolefin with Maleic Anhydride			
CAS#:	USOS:	TWA :	STEL :	PERCENT: Trade Secret
<b>B. CHEMICAL</b>	Emulsifier			
CAS#:	USOS:	TWA :	STEL :	PERCENT: Trade Secret
<b>C. CHEMICAL</b>	Ethylene Glycol Monobutyl ether			
CAS#: 111-76-2	USOS:	TWA :	STEL :	PERCENT: ≤9
<b>D. CHEMICAL</b>	Chloroform			
CAS#: 67-66-3	USOS:	TWA :	STEL :	PERCENT: <0.25
<b>E. CHEMICAL</b>	Water			
CAS#:	USOS:	TWA :	STEL :	PERCENT: ≥60

OSHA Hazardous Components (29CFR1910.1200): Component C is hazardous ingredient.

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### Section III Physical and Chemical Properties

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Boiling Point	212°F
Specific Gravity (H <sub>2</sub> O=1)	N/A
Vapor Pressure	N/A
Vapor Density (Air=1)	N/A
Percent Volatile By Weight	70
Evaporation Rate (BuAc=1)	N/A
Solubility in Water	soluble
Appearance and Odor	Brown emulsion with slight odor.

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### Section IV Fire and Explosion Hazard Data

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Flash Point (Method Used)	137.1°F (54.4°C) TCC
Flammable Limits in Air (% By Volume)	N/A
Extinguishing Media	Water spray, Foam, Dry Chemical, CO <sub>2</sub>
Special Fire Fighting Procedures:	Evacuate personnel to a safe area. Wear self-contained breathing apparatus. Wear full protective equipment. Use extinguishing agents appropriate for surrounding fire.
Unusual Fire and Explosion Hazard	Slight fire hazard

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## Section V Reactivity Data

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Stability	Stable
Conditions to Avoid	Avoid heat, flames, sparks and other sources of ignition. Avoid incompatible materials. Keep out of water supplies and sewers.
Incompatibilities	Avoid contact with strong oxidizing agents and acids.
Hazardous Decomposition or By Products	Thermal decomposition will produce chlorine compounds.
Hazardous Polymerization	May Not Occur

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## Section VI Health Hazard Data

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Primary Routes of Entry	Inhalation: Yes	Dermal: Yes	Ingestion: Yes
Acute Health hazard	Moderately toxic: ingestion; Slightly toxic: inhalation, dermal absorption.		
Chronic Health Hazard	No information available		
Carcinogenicity	Not available		
NTP: No	IARC Monograph: No	OSHA Regulated: No	

### Signs and Symptoms of Exposure

Skin Contact	May cause irritation
Eye Contact	May cause irritation
Ingestion	Although ingestion is unlikely, liquid would irritate upper digestive tract if swallowed.
Inhalation	May be harmful if inhaled

### Medical Condition Generally Aggravated by Exposure

### Emergency First Aid Procedures

Eyes	Immediately flush eyes with plenty of water. Call a physician.
Skin	Immediately wash skin with soap and water. Wash contaminated clothing before reuse.
Ingestion	Do not induce vomiting. Never give anything by mouth to an unconscious person. Call a physician.
Inhalation	Immediately remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen. Call a physician if needed.

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## Section VII Precautions for Safe Handling and Use

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### Steps to be Taken in Case the Material is Released or Spilled

Soak up with sawdust, sand, oil dry or other absorbent material.

### Waste Disposal Method

As in accordance with EPA and local regulations. Dissolve and mix with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

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## Section VIII Special Precautions

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### Precautions to be Taken in Handling and Storage:

Store in a well-ventilated place at temperatures above 0°C, preferably between 5°C and 40°C. Keep container tightly closed. Keep from freezing. Keep separated from incompatible substances.

### Section IX Control Measures

Respiratory Protection	Needed	
Ventilation	Local exhaust	Recommended
	Mechanical	Must be explosion resistant
	Special	
	Other	
Eye Protection	Safety glasses should be worn	
Protective Gloves	Rubber or plastic gloves should be worn	
Protective Clothing	Rubber apron	
Other Protective Equipment	NIOSH approved respirator as needed	
Other Precautions	Wash hands after use	

### Section X SARA Title III

#### SECTION 313 SUPPLIER NOTIFICATION

This product contains the following toxic chemicals subject to the reporting requirements of SECTION 331 of the EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW ACT OF 1986 and of 40 CFR 371

CAS #

Chemical Name

Percent by Weight

THIS INFORMATION MUST BE INCLUDED IN ALL MSDS'S THAT ARE COPIED AND DISTRIBUTED FOR THIS MATERIAL

### Section XI Transportation Information

#### SHIPPING INFORMATION

#### Hazard Ratings

Health	1
Flammability	2
Reactivity	0

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 Prepared By ..... API  
 Date Revised ..... November 16, 2009  
 Revised By ..... API

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