



**DESCRIPTION:** Cycloaliphatic, high performance, ambient curing hardener. Increased bond strength with superior impact, abrasion, and chemical resistance. Cures at low temperatures, highly resistant to amine blush and water spotting. Low viscosity, no VOCs, 100% solids. DOT Non-Regulated.

**SUGGESTED USES:**

Laminating, adhesives, coatings and civil engineering repair compounds.

**PROPERTIES OF MARINE GRADE 143 HARDENER:**

Viscosity at 77°F, cps	500 – 700
Color (Gardener)	6 (New, color changes with age; Does not affect performance properties)
Weight Per Gallon	8.8lbs
Mix Ratio, Parts Per 100 Resin	45 by weight (2:1 volume)
Gel Time at 77°F (75 Grams)	25 – 30 minutes
Thin Film Set Time, Hours	6 – 8

**PROPERTIES WHEN CURED WITH MARINE GRADE 314 RESIN:**

(Cure schedule: Gel at ambient + 2 hours at 100°C or 7 days at 77°F)

HDT, °F	130	ASTM D648-264
Shore D Hardness	82	
Flexural Strength, psi	11,000	
Flexural Modulus, psi	418,000	
Tensile Strength, psi	7,500	
Tensile Modulus, psi	375,000	
Elongation %	5.0	

**MARINE GRADE 143 CHEMICAL RESISTANCE GUIDE (3 week immersion):**

(The closer the % gain/loss is to 0.0 time, the better the resistance to that chemical.)

Reagent %	weight gain (loss)
Xylene	0.1
Toluene	2.3
1,1,1 Trichloroethane	0.1
MEK	2.3
EB (Ethylene Glycol Monobutyl Ether)	2.4
Ethyl Alcohol	6.9
Water (deionized)	1.2
5% Detergent Solution	0.0
10% Sodium Hydroxide	0.1
50% Sodium Hydroxide	(0.2)
10% Sulfuric Acid	0.01
70% Sulfuric Acid	0.2
10% Hydrochloric Acid	0.1
5% Acetic Acid	2.6
10% Acetic Acid	5.4
Skydrol	(0.03)
Synthetic Gasohol	0.01

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## TAP MARINE GRADE 143 SLOW HARDENER

### **SAFETY PRECAUTIONS:**

#### **Health Considerations: Consult the TAP Plastics Material Safety Data Sheets.**

This chemical system requires the use of proper safety equipment and procedures. Please follow the TAP Plastics product MSDS for detailed information and handling guidelines.

#### **For Your Protection:**

The information and recommendations in this publication are, to the best of our knowledge, reliable. Suggestions made concerning the products and their uses, applications, storage and handling are only the opinion of TAP Plastics. Users should conduct their own tests to determine the suitability of these products for their own particular purposes and of the storage and handling methods herein suggested. The toxicity and risk characteristics of products made by TAP Plastics will necessarily differ from the toxicity and risk characteristics developed when such products are used with other materials during a manufacturing process. The resulting risk characteristics should be determined and made known to ultimate end-users and processors. Because of numerous factors affecting results, TAP Plastics makes no warranty of any kind, express or implied, other than that the material conforms to its applicable current Standard Specifications. TAP Plastics hereby disclaims any and all other warranties, including but not limited to those of merchantability or fitness for a particular purpose. No statements made herein may be construed as a representation or warranty. The liability of TAP Plastics for any claims arising from or sounding in breach of warranty, negligence, strict liability, or otherwise shall be limited to the purchase price of the material.

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