



# NATIONWIDE PLASTICS, INC.

The Authority on Plastics Manufacturing and Distribution



## Polystone® M Chemical properties

Chemical Resistance	Polystone® M (UHMW-PE)		Polystone® M (UHMW-PE)
Acetaldehyde	+	Glycerine	+
Acetic acid	+	Hydrochloric acid	+
Acetone	+	Hydrogen peroxide	+
Acrylonitrile	+	Hydrogen sulphide	+
Allyl alcohol	96+	Lactic acid	+
Aluminum chloride	A+	Magnesium chloride	A+
Ammonia	A+	Mercury	+
Ammonium chloride	A+	Methanol	+
Aniline	+	Methyl ethyl ketone	+
Benzaldehyde	+	Methylene chloride	/
Benzene	/	Mineral oil	+
Benzyl alcohol	+	Motor oil	+
Bleach (Chlorine)	-	Nitric acid	+to/
Boric acid	A+	Nitobenzene	+
Butanol	+	Oleic acid	+
Butyl acetate	+	Ozone	/
Calcium chloride	+	Perchloric acid	50+
Carbon disulphide	/	Petroleum	+
Carbon tetrachloride	/M-	Phenol	+
Chlorine gas	/	Phosphoric acid	+
Chlorobenzene	/	Potassium chromate	40+
Chloroform	/M-	Potassium hydroxide	30+
Chromic acid	10+	Potassium nitrate	+
Citric acid	+	Potassium permanganate	+
Cyclohexanol	+	Pyridine	+
Cyclohexanone	+	Sea water	+
Dekalin	+	Sodium carbonate	10+
Dibutyl phthalate	+	Sodium chloride	10+
Diesel fuel	+	Sodium hydroxide	60+
Diethyl ether	+to/	Sulphuric acid	75+
Dioxane	+	Tallow	+
Ethanol	96+	Tetrahydrofurane	+M-
Ethyl acetate	+	Tetralin	+
Ethylene chloride	/	Thionyl chloride	-
Ethylene diamine	+	Toluene	/
Ferric chloride	A+	Transformer oil	+
Fluorine	-	Trichlorethylene	+M-
Formaldehyde	40+	Urea, aqueous	33+
Formic acid	+	Water	+
Furfural	+	Zinc chloride	A+

Values obtained at room temperature. Call for high or low temperature applications.  
 Number indicates concentration if < 100%. M= Values may change under mechanical stress  
 G=Gaseous state, A=Aqueous solution, S=Soluble.

+ = Specimen is resistant.....Swelling <3% or weight loss <0.5%. Break elongation not significantly altered.  
 / = Specimen has limited resistance...Swelling 3-8% or weight loss 0.5-5% and/or break elongation decreased by <50%  
 - = Specimen is not resistant.....Swelling > 8% or weight loss > 5% and/or break elongation decreased by >50%

All information and recommendations regarding properties and applications are based upon tests and data believed accurate. Any particular application is the sole responsibility of the user. No warranty is expressed or implied. Under no circumstances shall we be liable for incidental or consequential loss.

**East**  
 Röchling Engineered Plastics, P.O. Box 2729, Gastonia, NC 28053  
 (800) 541-4419, Fax: (704) 922-7651, Email [rep@roechling-plastics.us](mailto:rep@roechling-plastics.us)

**West**  
 Röchling Engineered Plastics, 2040 Carlos Avenue, Ontario, CA 91761  
 (800) 545-5177, Fax: (909) 923-3280, Email [rep@roechling-plastics.us](mailto:rep@roechling-plastics.us)



Updated 12-22-03 DVK

© 2002, 2003, Röchling Materials Corp.

Dallas, Texas (Corporate Offices)  
 Houston, Texas  
 Brandon, Mississippi

phone 800-782-1836 / 214-239-3870  
 phone 800-282-4388 / 713-979-0660  
 phone 800-457-8623 / 601-825-7919

fax 214-239-3871  
 fax 713-979-0664  
 fax 601-825-7109

[www.nationwideplastics.net](http://www.nationwideplastics.net)

January 1, 2007 - Version 3.0