Chemical Resistance of Ensinger Engineering Plastics

Mechanical Properties | Therm

Trade Name	Raw Material Group	Acetamide 50%	Acetic Acid conc.	Acetic Acid 10%	Acetic Acid 5%	Acetone	Ammonia 10%	Benzene	Bitumen	Boric Acid 10%	Butylacetate	Butylene Glycol	Calcium Chloride 10%	Carbon Disulphide	Carbon Tetrachloride	Chlorobenzene	Chloroform	Citric Acid 10%	Clophen A 60 50%	Copper Sulphate	Cyclohexane	Cyclohexanol	Cyclohexanone	Decahydronaphthalene	Diesel Oil	Dimethylformamide	Dioctylphthalate	Dioxane	Edible Oil, Edible Fat	Ethanol 96%	Ether	Ethyl Acetate	Ethylene Chloride	Formaldehyde 30%	Formamide
VEKTON® 6	Cast Nylon 6	+	-	-	⊙	+	+	+	⊙	-	+	+	-	+	+	+	-	⊙	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
ENSILON® 6/6	Nylon 6/6	+	-	-	⊙	+	+	+	⊙	-	+	+	-	+	+	+	-	⊙	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
ENSITEP®	PET (Polyethylene Terephthalate)		⊙	+	+	+	-	+			+		+	+	+	-	-	+	+						+			+	+	+	+	+	-		
ENSITAL®	Acetal Copolymer		-	⊙	+	+	⊙	+	+	+			+	+	+	+	+	+		+	+	+			+	+	+	+	+	+	+	-	+	+	
DELRIN®	Acetal Homopolymer		-	-	+	+	-	+	+	+			+	+	+	+	+	-		+	+	+			+	+	+	+	+	+	+	+	+	+	
ENSIDUR®	ABS (Acrylonitrile-Butadiene-Styrene)		-	⊙	+	-	+	-				-			-	-	-				-	-	-		-		-		-	-		-	-		
NORYL®	PPO (Polyphenylene Oxide)		+	+	+	-	+	-							-		-	+		+	+	+		-	+		+	⊙	+	+		+		+	
ENSICAR®	Polycarbonate		-	+	+	-	-	-	-	+	-	+	+	-	-	-	-	+		+	-	⊙	-	+	⊙	-	⊙	-	+	⊙	-	-	-		
ENSIFONE®	Polysulfone		+	+	+	-	⊙	-			⊙		+		⊙		-	+			+				+		+			+	+	-			
ENSIPRO®	Polypropylene		+	+	+	+	+	⊙		+	⊙	+	+	⊙	-	+	⊙	+			+	+	+		⊙	+	+	⊙		+		+	⊙	+	+
ULTEM®	Polyetherimide			+	+	+	-								+		-	+			+				+					+	+	⊙			
PEEK™	Polyetherether-ketone		+	+	+	+	+	+		+		+		+	+	+					+				+	+			+	+		+			
ENSIFIDE®	PPS (Polyphenylene Sulfide)		+	+	+	+	+	+		+	+		+	+	+		+	+		+	+	+	+		+		+	+	+	+	+	+	+	+	
ENSIKEM®	PVDF (Polyvinylidene Fluoride)	+	+	+	+	-	+	+		+	+	+	+	+	+	+	+	+		+	+	+	+		+	-		⊙	+	+	+	⊙	+	+	

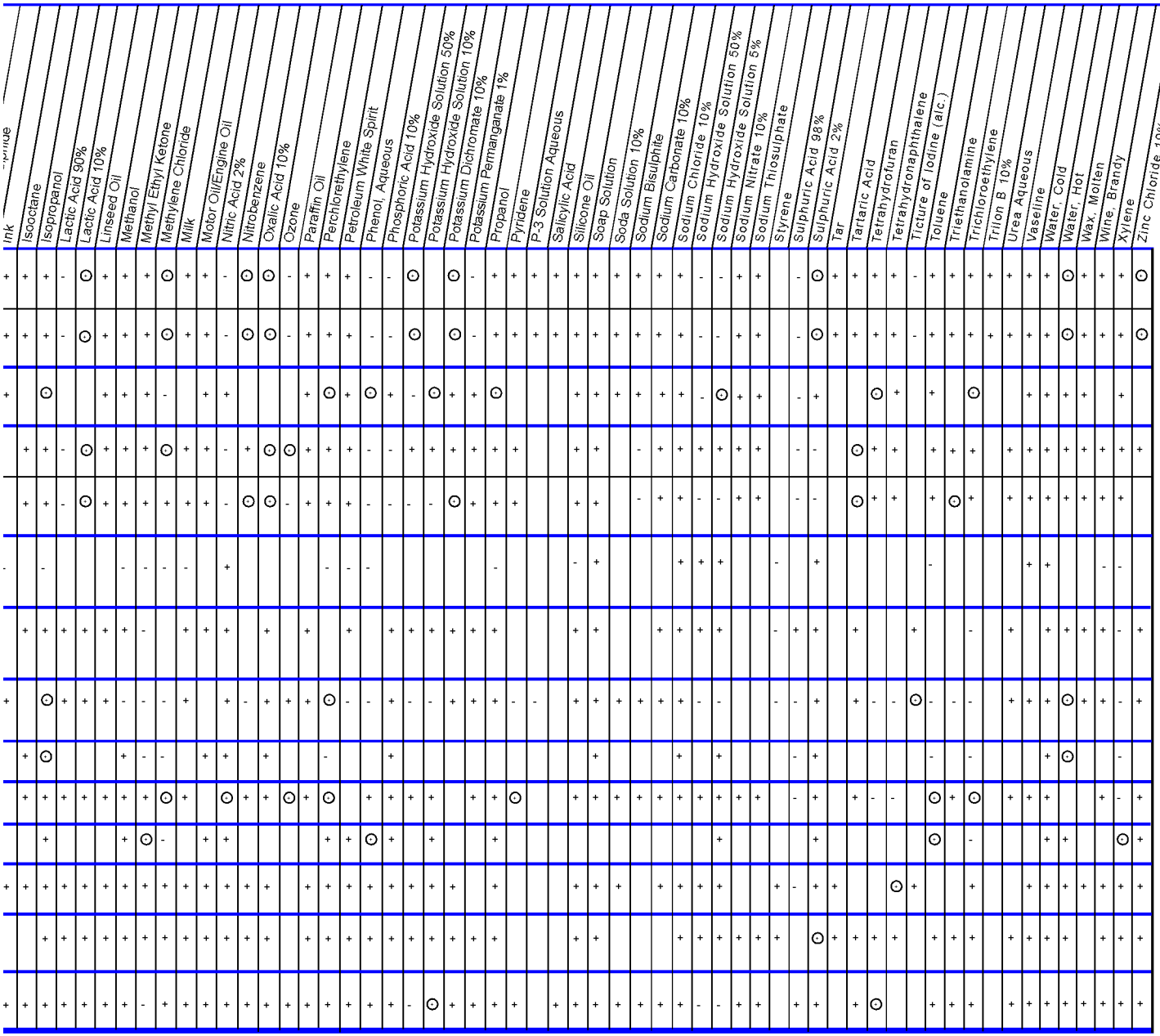
Trade Name	Formic Acid 10%	Frigen, Freon	Fruit Juices	Fuel Oil	Gasoline	Glycerine	Glycol	Glysantin 40%	Heptane/Hexane	Hydrochloric Acid 36%	Hydrochloric Acid 2%	Hydrofluoric Acid	Hydrogen Peroxide 30%	Hydrogen Peroxide 0.5%	Hydrogen Sulphide	Ink	Isooctane	Isopropanol	Lactic Acid 90%	Lactic Acid 10%	Linseed Oil	Methanol	Methyl Ethyl Ketone	Methylene Chloride	Milk	Motor Oil/Engine Oil	Nitric Acid 2%	Nitrobenzene	Oxalic Acid 10%	Ozone	Paraffin Oil	Perchlorethylene	Petroleum White S[illegible]	[illegible]
VEKTON® 6	-	+	+	+	+	+	+	+	+	-	-	-	-	-	-	+	+	+	-	⊙	+	+	+	⊙	+	+	-	⊙	⊙	-	+	+	+	-
ENSILON® 6/6	-	+	+	+	+	+	+	+	+	-	-	-	-	-	-	+	+	+	-	⊙	+	+	+	⊙	+	+	-	⊙	⊙	-	+	+	+	
ENSITEP®	+	+	+	+	+	+	+	+	+	-	+	⊙	+	+		+		⊙			+	+	+	-		+	+				+	⊙	+	⊙
ENSITAL®	-		+	+	+	+	+	+	+	-	-	-	-	-	⊙		+	+	-	⊙	+	+	+	⊙	+	+	-	+	⊙	⊙	+	+	+	-
DELRIN®	-		+	+	+	+	+	+	+	-	-	-	-	-	-		+	+	-	⊙	+	+	+	+	+	+	-	⊙	⊙	-	+	+	+	-
ENSIDUR®			⊙	-	-	+	-			+	+					-		-				-	-	-	-		+					-	-	-
NORYL®	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	-		+	+	+		+		+		+	
ENSICAR®	+	-	+	+	⊙ to -	⊙	+	+	+	+	+	⊙	+	+	+	+		⊙	+	+	+	-	-	-	+		+	-	+	+	+	⊙	-	-
ENSIFONE®		+			+	+	+	+	+	⊙	+	⊙	⊙	+			+	⊙				+	-	-		+	+		+			-		
ENSIPRO®	+	-	+	⊙		+	+		+	+	+	+	+	+	+		+	+	+	+	+	+	+	⊙	+		⊙	+	+	⊙	+	⊙		+
ULTEM®	+	+	+	+	+		+		+	+	+							+				+	⊙	-		+	+					+	+	⊙
PEEK™	⊙	+	+	+	+	+	+		+	+	+	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	-
ENSIFIDE®	+	+	+	+	+	+	+		+	+	+	+	-	+	+			+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	-
ENSIKEM®	+	⊙	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	-	+	+	+	+	+	+	+	+	+	+	-

®Ensinger, Inc.
Delrin® - DuPont Company
Noryl®, Ultem® - General Electric Company

The above results are the summary of several tests. The better resistance of the high-crystalline semi-finished products in comparison to injection molded thin parts which have been cooled rapidly and the smaller swelling of the EP-plastics are the result of Ensinger's special manufacturing process.

+
⊙
-

Thermal Properties



+ = resistant
⊙ = limited resistance
- = not resistant

Test-Temperature 20°C

This information is only to assist and advise you on current technical knowledge and is given without obligation or liability. All trade and patent right should be observed. All rights reserved.

PLASTIC & METAL CENTER, INC.
23162 La Cadena Drive
Laguna Hills, CA 92653

Tel: 949-770-8230
Fax: 949-770-8478
www.plastic-metal.com