



CHEMICAL RESISTANCE CHART

The following table gives a survey on the chemical effects of the test specimens which have not been reinforced. They do not contain fillers or colors and are made up of chemical resistant POLESTER 915 and POLESTER 815

It has to be pointed out, that fillers or colors as well as reinforcement materials (glass fibers) may be affected by chemicals. Therefore laminates should always be covered with a surface layer (gelcoat or topcoat) that does not contain any glass fibers.

Should more flexibility of the POLESTER-type be necessary, the resistance to chemicals will not be reduced if not more than 10% of a flexible POLESTER-type is added.

TEST METHOD AND TEST SPECIMENS

The test specimens are cast at room temperature and cured with initiator MEKP-50 and promoter Co-1, after which they will be post cured for 12 hours at a temperature of 100 0C. The evaluation is based on ' a one-year period under the indicated conditions (media and temperatures).

The figures = indicate the temperature (CC) of test medium POLESTER 815, 915 is resistant to during permanent exposure.

- = none resistance, at a permanent exposure to a test temperature of 25° C.

Test Medium	Conc % b.w.	Polestar 915	Polestar 815
Acetic acid	10	25	60
	25	-	60
	50	-	50
	75	-	25
Acetone	100	-	-
Aluminum potassium sulfate	All	25	60
Aluminum sulfate	All		
Aluminum bicarbonate	10		
	50		



Test Medium	Conc % b.w.	Polestar 915	Polestar 815
Ammonium hydroxide	5 10 20 Conc.	-	25
Ammonium carbonate	50 All	25	40
Ammonium nitrate	All	25	40
Aluminum sulfate	All	25	40
Apple juice		25	90
Barium chloride	All	25	80
Beer		25	90
Benzene		-	-
Benzyl alcohol		25	30
Boric acid	All	25	60
Butyric acid	50	25	60
Calcium chloride	All	25	80
Calcium hydroxide	All	25	60
Calcium hypochlorite	20		
Carbon dioxide			
Carbon disulfide		-	-
Carbon monoxide			
Carbon tetrachloride		25	25
Chlorline dioxide	15		
Chlorine gas dry		-	60
Chlorine gas wet			
Chloroform	100	-	-
Chromic acid	5 10 Conc.	25 25 25	25
Citric acid	All	25	60
Cupric II chloride	All	25	80
Cupric cyanide	All		
Cupric II sulfate	All	25	80
Diethyl ether			
Dimethyl phthalate		25	50



Test Medium	Conc % b.w.	Polestar 915	Polestar 815
Ethyl acetate	100	-	-
Ethyl alcohol	50	25	40
	100	-	40
Ethyl ether	100	-	-
Ethylene chloride	100	-	-
Ethylene glycol		25	60
Ethylene glycol acetate		25	25
Fatty acid		-	25
Ferric III chloride	All	25	60
Ferric III nitrate	All	25	60
Ferric III sulfate	All	25	80
Fluorsilicic acid	25		
Formaldehyde	All	25	50
Formic acid	30	25	60
	100		
Fruit juices		25	90
Furfural	5	-	-
	20	-	-
Gasoline		25	60
Glycerine	100	25	60
Hydrochloric acid	10	25	
	20	25	60
	36	25	40
Hydrocyanic acid	10	25	50
Hydrofluoric acid	10	-	25
Hydrogen peroxide	30	-	30
Lactic acid	10	25	60
	Conc	25	25
Lemonade		25	90
Linseed		25	60
Magnesium carbonate	All		
Magnesium chloride	All	25	80
Margarine		25	60
Methyl alcohol	100	-	25
Methyl ethyl ketone		-	-
Methylene chloride		-	-



Test Medium	Conc % b.w.	Polestar 915	Polestar 815
Milk		25	90
Mineral water		25	60
Nickel II nitrate	All	25	80
Nickel II sulfate	All	25	80
Nitric acid	5	25	
	20	25	
	30	25	40
	50	-	25
	70	-	-
Nitro dilution		-	-
Oleic acid		25	60
Oleum		-	-
Oxalic acid	All	25	60
Palmitic acid		25	60
Perchloric acid	20	25	25
	30	-	25
	70	-	25
Petroleum		25	90
Phenol	10	-	-
Phosphoric acid	50	25	100
	80	25	60
Potassium bicarbonate	All	25	80
Potassium bichromate	All	25	50
Potassium carbonate	All	25	60
Potassium hydroxide	10	-	60
	20	-	40
	40	-	25
Potassium permanganate	All	-	60
Sodium bicarbonate	10		40
Sodium chloride	All	25	80
Sodium carbonate	10	25	70
	25	25	60
	All	25	60
Sodium cyanide	All	25	40
Sodium hydroxide	5	25	70
	10	-	60
	25	-	40
	Conc	-	30



Test Medium	Conc % b.w.	Polestar 915	Polestar 815
Sodium hypochlorite	15	-	50
Sodium orthophosphate	All	25	60
Sodium silicate	All	-	40
Sulfonated detergents	100		
Sulfur dioxide dry		25	70
Sulfur dioxide wet		25	60
Sulfur trioxide			
Sulfuric acid	25	25	60
	50	25	60
	70	25	80
Tartaric acid	All	25	60
Tetrachloroethylene		25	50
Tetralin		25	60
Toluene		-	-
Trichloroethylene		-	-
Wine		25	80
Xylene		-	30