CHEMICAL RESISTANCE CHART

CHEMICALS AND FORMULA	CONCENTRATION	PLASTICS AND ELASTOMERS AT MAXIMUM TEMPERATURE (°F)											METALS																
		ABS	CPVC	PP	PVC	PVDF	TEFLON	EPDM	BUNA-N	HYPALON	NEOPRENE	FLUOROCARBON	ALUMINUM	COPPER	BRONZE (85% Cu)	SILCON BRONZE	ALUMINUM BRONZE	BRASS	GRAY IRON	DUCTILE IRON	CARBON STEEL	3% NI/IRON	NI PLATED DUCTILE	400 SERIES S.S.	316 S.S.	17-4 PH	ALLOY 20	MONEL	STELLITE	HASTELLOY C
Acetaldehyde CH_3CHO	Conc.			120	C	C	350	200	C	C	C	C	B	C	C	C	C	C	B	B	A		B	B	A		A	A	A	A
Acetamide CH_3CONH_2				73		75	350	200	C	C	C	C	B		A		A		A	A			A	A	A	A	A	A	A	A
Acetic Acid CH_3COOH	25%		73	180	140	200	350	140	C	200	C	C	C	C	C	C	C	C	C	C	C	C	C	A	A	A	A	A		A
Acetic Acid CH_3COOH	60%		73		73	175	350	140	C		C	C	C	C	C	C	C	C	C	C	C	C	C	A	A	A	A	A		A
Acetic Acid CH_3COOH	85%		C	120	73	150	350	140	C		C	C	C	C	C	C	C	C	C	C	C	C	C	A	A	A	A	A		A
Acetic Acid CH_3COOH	Glac-ial		C	120	73	120	350	140	C		C	C	C	C	C	C	C	C	C	C	C	C	C	C	A	B	A	A		A
Acetic Anhydride $(CH_3CO)_2O$					C	C	350	C	70	200	B to 70	C	B	C	C	C	C	C	C	C	C	C	C	C	B	B	B	B		A
Acetone CH_3COCH_3			C	73	C	C	350	130	C	B to 70	C	C	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Acetophenone $C_6H_5COCH_3$				120		C	350	140	C		C	C	C	C	C	C	C	C	C	C	C	C	C	C	C					
Acetyl Chloride CH_3COCl		C				125	200	C	C	C	C	185	C	A	A	A	A	A	C	C	A		C		A	A	A	A		
Acetylene $HC{\equiv}CH$	Gas 100%	70		73	140	250	250	200	140	70	70	200	A	C	C	C	C	C	A	A	A	A	A	A	A	A	A	A	A	A
Acetylnitrile			C		C	150		C	C		70	C													A		A			A
Acrylic Acid $H_2C{:}CHCOOH$	97%				C	150	200																							
Acrylonitrile $H_2C{:}CHCN$			C		C	73	350	C	C	140	C	C	B		A	A	A	A	A	A	A	A	A	A	A	A	A	A		A
Adipic Acid $COOH(CH_2)_4COOH$	Sat'd		185		140	150	350	200	180	140	160	250	B	A					C	C	B		C		B to 200		B	B to 200		A
Allyl Alcohol $CH_2{=}CHCH_2OH$	96%				73	125	250	70	160	200	B to 70	185			A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Allyl Chloride CH_2CHCH_2Cl					C	212	350	C	C			70	C								C									
Aluminum Acetate $Al(C_2H_4O_2)_3$	Sat'd					275	350	200	B to 70	C	C	C	C		C		C			C					A		A	B		
Aluminum Ammonium Sulfate (Alum) $AlNH_4(SO_4)_212H_2O$	Sat'd			150	140	275	250	200	140			200	A	B	B	B	B	B			C			B	A		A	A		
Aluminum Chloride Aqueous $AlCl_3$	Sat'd		185	180	140	280	250	210	70	200	160	250	A	C	C	C	C	C	C	C	C	C	C	C	A	C	A	A		
Aluminum Fluoride Anhydrous AlF_3	Sat'd				73	280	250	210	180	200	160	250		C	C	C	C	C	C	C	C		C	C	B	C	B	A		
Aluminum Hydroxide $AlO_3{\bullet}3H_2O$	Sat'd		185		140	280	250	210	180		100	200		C	C	C	C	C	B	B	C		B	B	A	A	A	B		
Aluminum Nitrate $Al(NO_3)_3{\bullet}9H_2O$	Sat'd		185	180	140	280	250	210	180	100	100	100	C	C	C	C	C	C	C	C	C	C	C		A	A	A	C		
Aluminum Oxychloride					140	275						C																		
Aluminum Potassium Sulfate (Alum) $AlK(SO_4)_2{\bullet}12H_2O$	Sat'd			150	140	280	400	200	180	200	160	200	A	B	B	B	B	B			C			B	A		A	A		
Aluminum Sulfate (Alum) $Al_2(SO_4)_3$	Sat'd		185	180	140	280	250	210	200	160	140	185	C	C	C	C	C	C	C	C	C		C	C		B				A
Ammonia Anhydrous NH_3							250	200			100	C		C	C	C	C	C	A		A				A	A	A	A		A
Ammonia Gas NH_3	100%		185	150	140	C	400	140	140	140	140	C	B	B	B			C	A		A				A	A	A	A		A
Ammonia Liquid NH_3	100%			73	C	C	400	210	B to 70	70	70	C	A	C	C	C	C	C			A			A	A	A	A	A		A
Ammonium Acetate $NH_4(C_2H_3O_2)$	Sat'd			73	140	175	400	140		140	140				C	C	C	C							B			B		
Ammonium Bifluoride NH_4HF_2	Sat'd		185		140	150	400	200	180			200		B to 70	C			C	C	C	C	C	C	C	B	B	B	B		
Ammonium Bisulfide $(NH_4)HS$					140	280	400		180																					
Ammonium Carbonate $CH_2O_3{\bullet}2H_3N$	Sat'd			180	140	280	400	210		140	140	250	B to 212	B to 70	C			C			A to 140	C		B	B	B	B	B		A

MATERIAL RATING FOR THERMOPLASTICS & ELASTOMERS

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		ABS	CPVC	PP	PVC	PVDF	TEFLON	EPDM	BUNA-N	HYPALON	NEOPRENE	FLUOROCARBON	ALUMINUM	COPPER	BRONZE (85% Cu)	SILCON BRONZE	ALUMINUM BRONZE	BRASS	GRAY IRON	DUCTILE IRON	CARBON STEEL	3% NI/IRON	NI PLATED DUCTILE	400 SERIES S.S.	316 S.S.	17-4 PH	ALLOY 20	MONEL	STELLITE	HASTELLOY C
Ammonium Chloride NH_4Cl	Sat'd		185	180	140	280	400	210	180	200	160	250	B		C			C	C	C	C	C	C	C	B	C	B	B		B
Ammonium Dichromate $(NH_4)_2Cr_2O_7$					73	250		70	100	100	100																			
Ammonium Fluoride NH_4F	10%				140	280	400	210	100	200	100		C	C	C			C			C				C					
Ammonium Flouride NH_4F	25%				73	280	400	140					C	C	C			C			C				C					
Ammonium Hydroxide NH_4OH	10%		185	180	140	225	400	210	B to 70	200	70	70	B	C	C	C		C			C			B	A	A	A	B		A
Ammonium Nitrate NH_4NO_3	Sat'd	175	185	180	140	280	400	250	180	200	160	100		C	C	C		C								A	A	A		A
Ammonium Persulphate $(NH_4)_2S_2O_8$			73	150	140	73	200	210		70	70		C	C	C	C	C	C	C	C	C	C	C	B	A		A	C		A
Ammonium Phosphate (Monobasic) $NH_3H_3PO_4$	All				140	280	400	210	100	140	140	185	B	C	C	C	C	C	B	B	C		B	A	A	A	A	B		A
Ammonium Sulfate $(NH_4)_2SO_4$			185	180	140	280	400	210	180	200	160	200	C	C	C	C	C	C	B	B	C	B	B	B	B	B	A	B		A
Ammonium Sulfide $(NH_4)_2S$	Dilute					125	350	210	140	200	160		A	C	C	C	C	C	C	C	C		C		B		B	B		
Ammonium Thiocyanate NH_4SCN	50-60%				140	275			70	70	70	185	B	C	C	C	C	C	C	C	C		C		A	A	A	B		A
Amyl Acetate $CH_3COOC_5H_{11}$				C	C	125	100	B to 70	C	C	C	C	A		B	B	B	B	B	B	B	A	B	A	A	A	A	A	A	A
Amyl Alcohol $C_5H_{11}OH$			73	180	C	280	400	210	B to 140	200	140	185		A	A	A	A	A	B	B	B		B	A	A	A	A	A		
n-Amyl Chloride $C_5H_{11}Cl$					C	280	400	C	C	C	C	200	C		A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Aniline $C_6H_5NH_2$			C	180	C	120	200	140	C	70	C	C	C	C	C	C	C	C	B	B	C	B	B	A	A	A	A	B		A
Aniline Chlorohydrate					C																									A
Aniline Hydrochloride $C_6H_5NH_2$•HCl	Sat'd		C		C	75				C	C	185			C	C	C	C	C	C	C	C	C	C	C	C		A		
Anthraquinone $C_{14}H_8O_2$					140							200							C	C	C									
Anthraquinone Sulfonic Acid $C_{14}H_7O_2$•SO_3H•$3H_2O$					140							200																		
Antimony Trichloride $SbCl_3$	Sat'd			180	140	73		140	140	140	140	185	C		C	C	C	C	C	C	C	C	C	C	C	C	A	A		
Aqua Regia (Nitrohydrochloric Acid) $ClHHNO_3$			73		C	73	200	C	C	B to 70	C	100	C		C	C	C	C	C	C	C	C	C		B		B			B
Argon Ar	Dry						350	200			100	200		A	A		A		A		A				A	A		A	A	
Arsenic Acid H_3AsO4•$1/2H_2O$	80%		185		140	280	400	185	160	200	180	200	C		C	C	C	C	C	C	C		C	B	A	B	A	A		A
Aryl Sulfonic Acid $C_6H_5SO_3H$					140			140				185																		
Asphalt			C		C	250	350	C	B to 70	C	C	180	C	A	A	A	A	A	A	A	A	A	A	A	A	A	A	B		A
Barium Carbonate $BaCO_3$	Sat'd				140	280	400	250	180	200	160	250			A	A	A	A	B	B	B	B	B	A	A	A	A	A		
Barium Chloride $BaCl_2$•$2H_2O$	Sat'd				140	280	400	250	180	200	160	300		A	A	A	A	A	B	B	C	B	B	B	A		A	A		
Barium Hydroxide $Ba(OH)_2$	Sat'd				140	280	400	200	180	200	140	300			C	C	C	C	B	B	C		B	A	A	A	A	A		A
Barium Nitrate $Ba(NO_3)_2$	Sat'd				73	275	250	200	180	200	160	300			C	C	C	C	A	A	A		A		A		A			
Barium Sulfate $BaSO_4$	Sat'd		185		140	280	400	200	100	200	160	300			B	B	B	B	B	B	A		B	A	A	A	A	A		
Barium Sulfide BaS	Sat'd				140	280	400	140	C	200	160	300		C	C	C	C	C	B	B	C		B	A	A	A	A	A		
Beer		C		180	140	200	300	200	70	200	140	200	A	A	A	A	A	A	C	C	C		C	A	A	A	A	A		

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Beet Sugar Liquors				180	140	225		210	100	200	160	185	A				A		B	B	B				A	A	A	A		
Benzaldehyde C_6H_5CHO	10%	C		73	73	70		140	C	C	C	C		A	A	A	A	A	C	C	B		C	A	A	A	A	B		A
Benzene C_6H_6		C	C	C	C	170	250	C	C	C	C	150		A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Benzene Sulfonic Acid $C_6H_5SO_3H$	10%			180	140	125		C	C	180	100	185			B	B	B	B	C	C	C		C	B	B	B	A	A		
Benzoic Acid C_6H_5COOH	All			73	140	230	350	C	C	200	160	200			C	C	C	C	C	C	C		C	A	A	A	A	A		A
Benzyl Alcohol $C_6H_5CH_2OH$				150	C	250		C	C	140	B to 140	B to 140		A	A	A	A	A	B	B	B		B	A	A	A	A	A	A	
Bismuth Carbonate $(BiO)_2CO_3$					140				70	100	70																			
Black Liquor	Sat'd		185		140	175	225	180	180	70	70	200			C	C	C	C	B	B	B		B	B	A	B	A	B		
Bleach	5% Active Cl_2		180	120	140	280	200	140	C			185			C	C	C	C	C	C	C		C	B	A	B	A	A		A
Bleach	12% Active Cl_2	C	180	C	140	280	200	140	C	70		185			C	C	C	C	C	C	C		C	B	A	B	A	A		A
Blood							200		70	70	70	70			B		B		C	C			B		A	A	A	A		A
Borax $Na_2B_4O_7{\cdot}10H_2O$	Sat'd			180	140	280		210	140	200	140	185			A	A	A	A	A	A	B	A	A	A	A	A	A	A	A	A
Boric Acid H_3BO_3	Sat'd		185	180	140	280		210	140	200	140	185			B	B	B	B	C	C	B		C	B	A	B	A	A		A
Brake Fluid							300	140	C			C			B				B	B	A		B	A	A	A	A	A		
Brine	Sat'd		185	180	140	280	400	250	180	180	160	300			A	A	A		C	C	C	B	C	B	A	B	A	A		A
Bromic Acid $HBrO_3$			185		140	200		70				70	C	C	C	C	C	C												
Bromine Br_2	Liquid	C		C	C	150		C	C	70	C	70	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C		A
Bromine Br_2	Vapor	C		C	140	150		C	C	70	C	70	C	C	C	C	C	C	C	C	C	C	C	C	C	C	A	A		A
Bromine Water	Cold Sat'd	C		C	140	212		C	C	70	C	185	C	C	C	C	C	C	C	C	C		C							
Bromotoluene C_7H_7Br					C	150		C				150																		
Bromotoluene $C_6H_5CH_2B_2$				C	C	175																								
Butadiene $H_2C{:}CHHC{:}CH_2$	50%		73		140	250	350	C	C	B to 140	140	185	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Butane C_4H_{10}	50%			73	140	250	350	C	70	200	70	185	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Butyl Acetate $CH_3COOCH(CH_3)(C_2H_5)$			73	C	C	73	175	140	C	C	C	C			B	B	B	B	B	B	B		B	A	A	A	A	A		A
Butyl Alcohol $CH_3(CH_2)_2CH_2OH$		C	73	100	100	225	300	200	B to 140	140	140	75		B	B	B	B			B			A	A	A	A	A			
Butyl Cellosolve $HOCH_2CH_2OC_4H_9$					73		200	140	C	100		C			A	A	A	A	A	A			A	A	A	A	A	A	A	
n-Butyl Chloride C_4H_9Cl						280	400	C	C	C	C	100			B	B	B	B	B	B	B		B	B	B	B	B	B		
Butylene (C) $CH_3CH{:}CHCH_3$	Liquid				140	280	400	C	70	C	C	100			A	A	A	A			A			A	A	A	A	A	A	A
Butyl Phenol $C_4H_9C_6H_4OH$					73	230				B to 70	C																			
Butyl Phthalate				180								70																		
Butyl Stearate $CH_3(CH_2)_{16}CO_2(CH_2)_3CH_3$					73	100	250	C	100		C	185			A	A	A	A	B	B			B	A	A	A	A			
Butynediol $HOCH_2C{:}CCH_2OH$					73					100	B to 70																			

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Butyric Acid $CH_3CH_2CH_2COOH$				180	73	230	300	140		C	C	70			A	A	A	A	C	C	C	C	C	B	A	A	A	A		
Cadmium Cyanide $Cd(CN)_2$			185		140						70																			
Calcium Bisulfide $Ca(HS)_2•6H_2O$					C	280	200		100	C		185													A		A			
Calcium Bisulfite $Ca(HSO_3)_2$			185	180	140	280	350	C	70	200	70	185			C	C	C	C	C	C	C		C	B	A		A	C		A
Calcium Carbonate $CaCO_3$			185	180	140	280	350	210	100	70	70	300		A	C	C	C	C	B	B	B		B	A	A	A	A	A		A
Calcium Chlorate $Ca(ClO_3)_2•2H_2O$					140	280	350	140	70	70	70	185		C	B	B	B	B	B	B	B	B	B	B	A		A	A		
Calcium Chloride $CaCl_2$		100	185	180	140	280	350	210	100	200	160	250		B	B	B	B	B	A	A	C		C	B	A	B	A	A	B	A
Calcium Hydroxide $Ca(OH)_2$			185	180	140	280	250	210	140	200	70	250	C	C	C	C	C	C	C	C	C		C	A	A	A	A	A		A
Calcium Hypochlorite $Ca(OCl)_2$	30%		185	150	140	200	200	70	C	140		185	C	C	C	C	C	C	C	C	C		C	B	B	B	B	C		B
Calcium Nitrate $Ca(NO_3)_2$				180	140	280	200	210	180	100	100	200		B	B	B	B	B	B	B			B		A		A	A		
Calcium Oxide CaO						140	250		210	180	200	160							A	A	B				A	A	A			
Calcium Sulfate $CaSO_4$		100			140	280	200	210	180	200	160	200		A	A	B	B	B	A	A	B	A	A	A	A	A	A	A	A	A
Camphor $C_{10}H_{16}O$		C			73		350	210	100	70	C	250			B	B	B	B	B	B	B		B	A	A	A	A	B		
Cane Sugar $C_{12}H_{22}O_{11}$				73	140	275	400	250	180	100	160	200			A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Caprylic Acid $CH_3(CH_2)_6COOH$						175	350												A	A	B		A		A		A			
Carbitol					73		200	70	70	70	70	100			B	B	B	B	B	B	B		B		B		B	B		
Carbon Dioxide CO_2	Dry 100%	100	185	150	140	280	400	200	180	200	160	200	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	
Carbon Dioxide CO_2	Wet	100	185	150	140	280	400	210	180	200	160	200	A	A	A	A	A	A	B	B	B	B	B	A	A	A	A	A	A	A
Carbon Disulfide CS_2				C	C	73	200	C	B to 70	C	C	70		C	B	B	B	B	A	A	A		A	A	A		A	A		A
Carbon Monoxide CO	Gas		185		140	275	400	250	70	200	70	250	A		A	A	A	A	A	A	B		A	A	A	A	A	A		A
Carbon Tetrachloride CCl_4		C	73	C	73	280	350	C	C	C	C	185		B	A	A	A	A	C	C	A		C	A	A	A	A	A		A
Carbonic Acid H_2CO_3	Sat'd		185		140	280	350	210	180	70	70	200			C	C	C	C	B	B	B	B	B	A	A	A	A	A	B	
Castor Oil			185		140	280	350	140	140	150	100	140	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Caustic Potash KOH	50%		185		140	280	350	200	180	200	160	C									B			A	A	A	A	A		
Caustic Soda NaOH (Sodium Hydroxide)	Up to 40%	70	210	180	100	C	350	180	C	140	160	C	C	B	B	C	C	C	B	B	B	B	B	A	A	A	A	A		
Cellosolve $C_4H_{10}O_2$					73	280	200	140	C	70		C			A	A	A	A	A	A	A		A		A		A		A	
Cellosolve Acetate $CH_3COOCH_2CH_2O C_2H_5$					73		300	140	C	C	C	C	B		B		B			B					B		B			A
Chloral Hydrate $CCl_3CH(OH)_2$	All				140	75				70	B to 70	C																		
Chloramine NH_2Cl	Dilute				73					70	70				B	B	B	B	C	C	C				B		B	B		
Chloric Acid $HClO_3•7H_2O$	10%				140		140			200	140	140			C	C	C	C	C	C	C	C	C	C	B	C	A	C		
Chloric Acid $HClO_3•7H_2O$	20%				140		140					100			C	C	C	C	C	C	C	C	C	C	C	C	A	C		
Chlorine Gas (Dry) (Moisture Content)	0-20 PPM			C	73	200	400	C	C	C	C	185	C	C	C	C	C	C	B	A*	A*	B	B	B	A		A	A		A

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CHEMICAL RESISTANCE CHART

CHEMICALS AND FORMULA	CONCENTRATION	PLASTICS AND ELASTOMERS AT MAXIMUM TEMPERATURE (°F)											METALS																
		ABS	CPVC	PP	PVC	PVDF	TEFLON	EPDM	BUNA-N	HYPALON	NEOPRENE	FLUOROCARBON	ALUMINUM	COPPER	BRONZE (85% Cu)	SILCON BRONZE	ALUMINUM BRONZE	BRASS	GRAY IRON	DUCTILE IRON	CARBON STEEL	3% NI/IRON	NI PLATED DUCTILE	400 SERIES S.S.	316 S.S.	17-4 PH	ALLOY 20	MONEL	STELLITE	HASTELLOY C
Chlorine Gas (Moisture Content)	20-50 PPM	C		C	C	200	400	C	C		C	185	C	C	C	C	C	C	C	C	A*	C	C	C	A*		C	A		A
Chlorine Gas (Moisture Content)	50+ PPM	C		C	C	200	400	C	C		C	185	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	A		A
Chlorine	Liquid	C	C	C	C	200		C		B to 70	C				B	B		B	C	C	C		C	C	C	C				
Chlorinated Water	10 ppm		73		140	230	400	210	140	B to 70	C	185	C	C	B	B	C	C			C		C	B	A	A	A	A		A
Chlorinated Water	Sat'd		73		140	230	400	70	C	B to 70	C	185	C	C	C	C	C	C			C			C	A	B	A	B		A
Chloroacetic Acid $CH_2CICOOH$	50%				140	C	200	70	C	200	C	C	C	C	C	C	C	C	C	C	C		C	C	C	C	B	B		
Chloroacetyl Chloride $CICH_2COCl$					73	125																								
Chlorobenzene C_6H_5Cl	Dry			73	C	170	200	C	C	C	C	70			A	A	A	A	C	C	B		C	A	A	A	A	A		A
Chlorobenzyl Chloride $ClC_6H_4CH_2Cl$					C	125																			A		A			
Chloroform $CHCl_3$	Dry		C	C	C	125	200	C	C	C	C	70			A	A	A	A	C	C	C		C	A	A	A	A	A	A	
Chloropicrin CCl_3NO_2					C	150																								
Chlorosulfonic Acid $ClSO_2OH$				C	73	C	200	C	C	C	C	C	C	C	C	C	C	C	B	B	C	C	B	C	C	C	B	A		A
Chromic Acid H_2CrO_4	10%		210	150	140	175	350	70	C	140		100	C	C	C	C	C	C	C	C	C	C	C	B to 212	A to 70		A to 125	B		A
Chromic Acid H_2CrO_4	30%		210	150	140	175	350	C	C	140		100	C	C	C	C	C	C	C	C	C	C	C	B to 212	B to 70		A to 125	C		A
Chromic Acid H_2CrO_4	40%		210	150	140	175	300	C	C	140		140	C	C	C	C	C	C	C	C	C	C	C	C	B to 70			C		A
Chromic Acid H_2CrO_4	50%		210	C	C	180	200	C	C	140		140	C	C	C	C	C	C	C	C	C	C		C	B to 70		B to 212	C		B
Chromium Potassium Sulfate $CrK(SO_4)_2 \cdot 12H_2O$			73	140	73	200		140	180	200	160	200								C					B	B	A	B		
Citric Acid $C_6H_8O_7$	Sat'd		185	180	140	275	200	210	70	140	140	200		C	C	C	C	C	C	C	C		C	B	A	A	A	A		A
Cocunut Oil				73	140	280	400	C	70	B to 140	100	185			B	B	B	B	C	C	B		C	B	A		A	B		
Coffee								140	100			200		A	A	A	A	A	C	C	C			A	A	A	A		A	
Coke Oven Gas				73	140	230	400	70	B to 70	140		185			B	B	B	B	A	A	A	A	A	A	A	A		B		
Copper Acetate $Cu(C_2H_3O_2)_2 \cdot H_2O$	Sat'd		73	73	73	250	350	100	180	C	160	140			C	C	C	C	C	C	C		C	B	A		A	B		A
Copper Carbonate $CuCO_3$	Sat'd				140	280	350	210				185												B	A		A	A		
Copper Chloride $CuCl_2$	Sat'd		185		140	280	350	210	180	200	160	200	C	C	C	C	C	C	C	C	C	C	C	B	A		A	B		A
Copper Cyanide $Cu(CN)_2$			185		140	275	350	210	180		160	185		C	C	C	C	C	C	C	C	A	C	B	A		A	B		
Copper Fluoride $CuF_2 \cdot 2H_2O$	2%				140	280		210	B to 70	140	140	185																		
Copper Nitrate $Cu(NO_3)_2 \cdot 3H_2O$	30%				140	280		210	B to 70	200	160	200	C	C	C	C	C	C	C	C	C		C	B	A		A	C		
Copper Sulfate $CuSO_4 \cdot 5H_2O$	Sat'd		185	120	140	280		210	180	200	160	200	C	C	C	C	C	C	C	C	C		C	A	A	A	A	C		A
Corn Oil			C	73	73	275	400	C	180	C	C	300		A	B	B	B	B	B	B	B	B	B	A	A	A	A	B		
Corn Syrup				150	140	250			100	200	100	185																		
Cottonseed Oil			185	150	140	280	400	C	180	200		185		A	B	B	B	B	B	B	B		B	A	A	A	A	B		
Creosote			73		73		350	C	73	73	C	73		B	B	B	B	B	A	A	A	A	A	A	A	A	A	A	A	A

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		ABS	CPVC	PP	PVC	PVDF	TEFLON	EPDM	BUNA-N	HYPALON	NEOPRENE	FLUOROCARBON	ALUMINUM	COPPER	BRONZE (85% Cu)	SILCON BRONZE	ALUMINUM BRONZE	BRASS	GRAY IRON	DUCTILE IRON	CARBON STEEL	3% NI/IRON	NI PLATED DUCTILE	400 SERIES S.S.	316 S.S.	17-4 PH	ALLOY 20	MONEL	STELLITE	HASTELLOY C
Cresol $CH_3C_6H_4OH$	90%			73	C	150	200	C	C	B to 140	C	100													B			B		
Cresylic Acid C_7H_8O	50%				140	150	200	C	C	C	C	185		A	A	A	A	A	A	A	B	A	A	A	A	A	A	A	A	
Croton Aldehyde $CH_3CH:CHCHO$					C	125	200		C		70	C																		
Crude Oil			185		140	280	400	C	70			200		C	C	C	C	C	C	C	B			A	A	A	A	B		
Cumene $C_6H_5CH(CH_3)_2$						100	300	C	C	C	C	200									B				B		B	B		A
Cupic Fluoride CuF_2					140	280		210																						
Cupric Sulfate $CuSO_4•5H_2O$	Sat'd	100		73	140	280	250	210	180	140	160	200																		
Cuprous Chloride CuCl	Sat'd	70			140	250	350	200	180	70	70	200		C	C			C												
Cyclohexane C_6H_{12}		100	C	C	C	280	300	C	C	C	C	185			A	A	A	A	B	B	A		B	A	A	A	A	A	A	A
Cyclohexanol $C_6H_{11}OH$		100	C	120	C	150	250	C	C	C	C	185							A	A			A	A	A	A	A			
Cyclohexanone $C_6H_{10}O$			C	C	C	73	200	70	C	C	C	C			B	B	B	B	B	B	B		B	B	A		A	B		A
Decahydronaphthalene $C_{10}H_{18}$							400	C	C	C	C	200																		
Detergents (Heavy Duty)		C	185	150	140			250	180	200	160	210		A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	
Dextrin (Starch Gum)	Sat'd				140	250	200	C	180			200		A	A	A	A	A	B	B	B				A		A			
Dextrose $C_6H_{12}O_6$					140	275	400	140	180	140	160	200			A	A			A						A		A			
Diacetone Alcohol $CH_3COCH_2C(CH_3)_2OH$			C	120	C	70	350	70	C		C	C		A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Dibutoxyethyl Phthalate $C_{20}H_{30}O_6$					C			B to 70	C	140	C	200			A	A	A	A	A	A	A		A		A		A			
n-Dibutyl Ether $C_4H_9OC_4H_9$						100	350	C	C	C	C	C																		
Dibutyl Phthalate $C_6H_4(COOC_4H_9)2$				120	C	C	350	70	C	C	C	C			A	A	A	A	A	A	A				A		A			
Dibutyl Sebacate $C_4H_9OCO(CH_2)_8OCOC_4H_9$					73	C	350	70	C	C	C	C																		
Dichlorobenzene $C_6H_4Cl_2$					C	150		C	C	C	C	150							A	A			A		A		A			
Dichloroethylene $C_2H_4Cl_2$				C	C	225	350	C	C	C	C	185					B			B					B			A		
Diesel Fuels					140	280	350	C	70	C	C	185		A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Diethylamine $C_4H_{10}NH$					C	73	200	70	70			C		C	C	C	C	C	A	A	C			A	A	A	A	B		
Diethyl Cellosolve $C_6H_{14}O_2$						280		C	140		100	200							A	A			A		A		A			
Diethyl Ether $C_4H_{10}O$				73	73	73		C				C																		
Diglycolic Acid $O(CH_2COOH)_2$	Sat'd				140	73	250	70	70			70																		
Dimethylamine $(CH_3)_2NH$				120	140	75		140	C	C	C	C							C						A		A			
Dimethyl Formamide $HCON(CH_3)_2$			C	120	C	C	250	C	100	100	C	C			B	B	B	B	B	B	B				A		A	A		
Dimethylhydrazine $(CH_3)_2NNH_2$					C	C						C																		
Dinonyl Phthalate $C_6H_4(COOC_9H_{19})_2$							32	B to 10	C	C	C	B to 10																		
Dioctyl Phthalate $C_6H_4(COOC_8H_{17})_2$			C	C	C	75	200	70		C	C	70			A	A	A	A	C	C	C									

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Dioxane $O:(CH_2)_4:O$		C		73	C	C		70	C	C	C	C			A	A	A	A	A	A	A				A		A	A		
Diphenyl Oxide $(C_6H_5)_2O$	Sat'd					125		C	C		C	300			A	A	A	A	A									A		
Disodium Phosphate Na_2HPO_4			185		140	200	400	210	100	140					B	B	B	B	B	B					A		A	B		
Dow Therm A $C_{12}H_{10}•C_{12}H_{10}O$					C		212	C	C	C	C	C			A	A	A	A	B	A	A		A	A	A	A	A	A	A	
Ether $C_4H_{10}O$			C	73	C	125			C	C	C	C		A	A	A	A		B	B	B	A	A	A	A	A	A	A	A	
Ethyl Acetate $CH_3COOC_2H_5$		C		120	C	C	200	70	C	C	C	C			A	A	B		A	A	A			A	A	A	A	A	B	A
Ethyl Acetoacetate $CH_3COCH_2COOC_2H_5$		C			C	73	200	100	C			C																		
Ethyl Acrylate $CH_2:CHCOOC_2H_5$			C		C	73	350	70	C	C	C	C			A	A			A	A	A		A	A	A	A	A	A	A	A
Ethyl Alcohol (Ethanol) C_2H_5OH			140	180	140	280	300	170	180	200	70				A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Ethyl Benzene $C_6H_5C_2H_5$				C	C	125	350	C	C	C	C	70			B	B			B	B	B		B		A		A	A		A
Ethyl Chloride C_2H_5Cl	Dry			73	C	280	350	B to 70	C	70	B to 70	140			A	A	B		A	A	A	A	A	A	A	A	A	A	B	A
Ethyl Chloroacetate $CH_2ClCO_2C_2H_5$					C	75																								
Ethylene Bromide $BrCH_2CH_2Br$	Dry				C	280	350		C			B to 70			A					A	A				A		A	A		A
Ethylene Chloride $ClCH_2CH_2Cl$	Dry	C		73	C	280	350		C	C		70													A		A	A		
Ethylene Chlorohydrin $ClCH_2CH_2OH$				73	C	73	200	70	C	70	70	C										A								
Ethylene Diamine $NH_2CH_2CH_2NH_2$		C		120	C	225		70	100	100	100			A	A	C		A	A	B				A		A	B			
Ethylene Dichloride $C_2H_4Cl_2$	Dry	C		73	C	280	350	C	C	C	C	120			A	A			A	A	A		A		A	A	A	A	A	
Ethylene Glycol CH_2OHCH_2OH		73	185	120	140	280		210	180	200	160	250		A	A	A	A	A	A	A	A		A	A	A	A	A	A	A	A
Ethylene Oxide CH_2CH_2O				C	C	C	400	C	C	C	C	C			A	A			B	A	A		A		A		A	B		A
Ethyl Ether $(C_2H_5)_2O$				C	C	125	250	C	C	C	C	C																		A
Ethyl Formate $HCOOC_2H_5$						73			C		70	C			A	A			A	A			A		A		A			
2-Ethylhexanol $CH_3(CH_2)_3CHC_2H_5CH_2OH$						250				70	C																			
Ethyl Mercaptan C_2H_5SH						75				C										A	A				A		A	A		
Ethyl Oxalate $(COOC_2H_5)_2$								140	C		C																			
Fatty Acids R-COOH			73	120	140	280	400	C	140	C	140	185	C		C	C	C	C	C	C	C		C		A		A	A		A
Ferric Chloride (Aqueous) $FeCl_3$	Sat'd		185	180	140	280	400	225	180	200	160	200	C	C	C	C	C	C	C	C	C	C		C	C	C	C	C		A to 175
Ferric Hydroxide $Fe(OH)_3$	Sat'd		185	180	140	250	400	180	100	100	100	180	C	C					C	C			C		A		A	A		
Ferric Nitrate $Fe(NO_3)_3•9H_2O$	Sat'd		185	180	140	280	400	210	180	140	160	200		C	C	C	C	C	C	C	C		C	B	A	A	A	C		A
Ferric Sulfate $Fe_2(SO_4)_3$				180	140	280	200	210	140	140	140	185		C	C	C	C	C	C	C	C		C	B	A	A	A	C		
Ferrous Chloride $FeCl_2$	Sat'd		185	180	140	280	400	200	180			200	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C			B
Ferrous Hydroxide $Fe(OH)_2$	Sat'd		185	180	73	250	400	180	180			180	C						C						A					
Ferrous Nitrate $Fe(NO_3)_2$			140	140	73	280	400	180	180	140	160	200													A	A	A			

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Ferrous Sulfate $FeSO_4$		70	185	180	140	280	400	200	180	140	160	200		B	C	C	B		C	C	C	C	C	A	A	A	A	A		A
Fish Oil					140		300	C	70	C		70		A	A	A	C		B	A	A		A	A	A	A	A	A	A	
Flue Gas								C	180			300			A	A			A	A	A		A	A	A	A	A	A	A	
Fluoboric Acid HBF_4			73	73	140	275	350	140	160	140	160	140	C	C	B	B			C	C			C		A		A	A		
Fluorine Gas (Dry) F_2	100%		73	C	73	73	C		C	140	C	C			B	B			C	C	A				A	A	A	A		A
Fluorine Gas (Wet) F_2					73	73	C	70				100			C	C			C	C	C				A	A	A	A		
Fluosilicic Acid H_2SiF_6	50%		73		140	280	300	140	100	200	100	210	C	C	B	B			C	C	C		C	B	B	B	A	A		A
Formaldehyde HCHO	Dilute			120	140	125	300	140	C	200	140	C			A	A	B		C	C	B			A	A	A	A	A		A
Formaldehyde HCHO	35%		73	180	140	125	300	140	C	150	140	C			A	A	B		C		B			A	A	A	A	A		A
Formaldehyde HCHO	37%		73	180	140	125	300	140	C	C	100	C			A	A	B		C		B			A	A	A	A	A		A
Formaldehyde HCHO	50%		73		140		300	140	C	C	140	C			B	B	B		C		B			B	A	A	A	A		A
Formic Acid HCOOH			73	73	73	250	300	200	C	70	140	C			C	C	B		C	C	C	B	C	A	A	A	A	A		A
Formic Acid Anhydrous HCOOH			73	180					C	160	100	C													A		A	A		
Freon 11 CCl_3F	100%	C	73		140	200	300	C	70	130	C	70		A	A	A	A	A	B	B	B		B	A	A	A	A	A		
Freon 12 CCl_2F_2	100%		73	73	140	200	C	C		130	130	C		A	A	A	A	A	B	B	B		B	A	A	A	A			
Freon 21 $CHCl_2F$	100%				C	200	300	C	C		C	C		A	A	A	A	A	B	B	B		B	A	A	A	A			
Freon 22 $CHClF_2$	100%			73	C	200	C	C	C	130	130	C		A	A	A	A	A	B	B	B		B	A	A	A	A			
Freon 113 $C_2Cl_3F_3$	100%				140	200	300	C	130	130	130	130		A	A	A	A	A	B	B	B		B	A	A	A	A			
Freon 114 C2Cl2F4	100%				140	200	300	C	130	70	70	C		A	A	A	A	A	B	B	B		B	A	A	A	A			
Fructose $C_6H_{12}O_6$			185		140	280	300	175	140	140	160	225							A	A			A	A	A	A	A	A		
Furfural C_4H_3OCHO				C	C	75	300	140	C	70	70	C		A	A	A	A	A	A	A	A		A	A	A	A	A	A		A
Gallic Acid $C_6H_2(OH)_3CO_2H$			73		140	75	300	70	C	70	70	185			B	B	C		C	C	C		C	A	A	A	A	A		A
Gasoline, Leaded		C	C	C	140	275	200	C	70	70	70	100	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Gasoline, Unleaded		C	C	C	140	280	200	C	70	70		100	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Gasohol		C		C	140	280	200	C	70			100	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Gasoline, Sour		C		C	140	280	200	C	70			100			B	B			A	A	A		A	B	A	A	A	C		A
Gelatin			150	180	140	250	300	200	180	200	160	250			C	C	B		C	C	C		C	C	C	A	A			
Glauber's Salt $Na_2SO_4 \cdot 10H_2O$							200	70	C	100	160	200			A	A		A	A	A			A	A	A	A	A	A	A	
Glucose $C_6H_{12}O_6 \cdot H_2O$		180	185	180	140	280	400	250	180	200	160	300	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Glue							250	400	100	140	200	160	250	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Glycerin $C_3H_5(OH)_3$		140	185	180	140	280	400	200	70	200	160	300	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Glycol $OHCH_2CH_2OH$			185		140	280	300	200	140	200	160	250			A	A			A	A	A		A	A	A	A	A	A		A

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CHEMICALS AND FORMULA	CONCENTRATION	PLASTICS AND ELASTOMERS AT MAXIMUM TEMPERATURE (°F)											METALS																	
		ABS	CPVC	PP	PVC	PVDF	TEFLON	EPDM	BUNA-N	HYPALON	NEOPRENE	FLUOROCARBON	ALUMINUM	COPPER	BRONZE (85% Cu)	SILCON BRONZE	ALUMINUM BRONZE	BRASS	GRAY IRON	DUCTILE IRON	CARBON STEEL	3% NI/IRON	NI PLATED DUCTILE	400 SERIES S.S.	316 S.S.	17-4 PH	ALLOY 20	MONEL	STELLITE	HASTELLOY C
Glycol Amine															C	C	C		A	A	A		A		A		A			
Glycolic Acid $OHCH_2COOH$	Sat'd			73	140	73	200		C	C	70	C			B	B			C	C	C		C		A		A	B		
Glyoxal CHOCHO									C	C	70				B	B	B		C	C	C		C		A	A	A	B		
Grape Sugar $C_6H_{12}O_6$					140			250	180	200	160	185																		
Grease								C	150	C	100	200			C	C	C	C	A	A	A		A		A	A	A	A	A	A
Green Liquor								150	150	70	70				C	C	C		A	A		A	A		A	A	A	A		
Gypsum $CaSO_4 \cdot 2H_2O$	Slurry					275	350	210	180	200	160	200		A	A	A	B	B	A	A	B	A	A	A	A	A	A	A		A
Heptane C_7H_{16}				C	140	280	300	C	70	70	70	185			A	A	A		A	A	A	A	A	A	A	A	A	A	A	A
n-Hexane C_6H_{14}		C	73	73	73	280	300	C	70	70	70	70			A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	
Hexanol $CH_3(CH_2)_4CH_2OH$					100	175	300	C	70	70	B to 70	160			A	A	A		A	A	A		A	A	A	A	A	A	A	A
Hydraulic Oil (Petroleum)					73		300	C	160	70	70	250			A	A	B		A	A	A		A	A	A		A	A	A	
Hydrazine H_2NNH_2					C	200	250	70	70	70		C			C	C	C	C	C	C	C		C		A		A	A		
Hydrobromic Acid HBr	20%		73	120	140	280	250	140	C	100	B to 70	185	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	
Hydrobromic Acid HBr	50%			140	140	280	250	140	C	100	B to 70	185	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	
Hydrochloric Acid HCl	35%	C	210	150	140	280	250	70	C	100		100	C	C	C	C	C	C	C	C	C	C	C	C	B	C	B	C	C	
Hydrochloric Acid HCl	37%	C	210	150	140	280	250	70	C	100		70	C	C	C	C	C	C	C	C	C	C	C	C	B	C	B	C	C	
Hydrocyanic Acid HCN	10%			73	140	280	250	200	70	200		185	C	C	C	C	C	C	C	C	C	C	C	C	A	B	A	A	C	A
Hydrofluoric Acid HF	Dilute		73	180	73	250	300	C	C	150	70	150	C	C	C	C	C	C	C	C	C	C	C	C	C	C	B	A	C	A
Hydrofluoric Acid HF	30%			120	73	250	300	C	C	150	70	150	C	C	C	C	C	C	C	C	C	C	C	C	C	C	B	A	C	A
Hydrofluoric Acid HF	40%	C	C	150	73	250	300	C	C	140	C	100	C	C	C	C	C	C	C	C	C	C	C	C	C	C	B	B	C	A
Hydrofluoric Acid HF	50%	C	C	100	73	200	300	C	C	140	C	70	C	C	C	C	C	C	C	C	C	C	C	C	C	C	B	B	C	A
Hydrofluosilicic Acid H_2SiF_6	50%		140	140	140	280	300	140	170	150		200	C	C	B	B			C	C	C		C	B	B	B	A	A		
Hydrogen H_2	Gas		73	73	140	280	300	250	180	200	160	300	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Hydrogen Cyanide HCN					140	280			70	100	70																A			
Hydrogen Fluoride Anhydrous HF			C	73	C	200	250	70	C			C													A	A	A			A
Hydrogen Peroxide H_2O_2	50%		185	150	140	150	300	100	C	200	C	185	C	C	C	C	C	C	C	C	B	C	C	A	A	A	A	A		
Hydrogen Peroxide H_2O_2	90%				140	73	300	C	C	200	C	100	C	C	C	C	C	C	C	C	B	C	C	A	A	A	A	B		B
Hydrogen Phosphide PH_3					140	150																								
Hydrogen Sulfide H_2S	Dry		185	150	140	280		100	C	140	C	140	B		B				B		B				A	B	A	A		A
Hydrogen Sulfide H_2S	Wet				140	225		100	C	70	C	140	C	C	C	C	C	C	C	C	C		C	C	A	C	A	B		B
Hydrogen Sulfite H_2SO_3								70	C	70		100		C	C	C	C	C	C	C	C		C	C	A		A	A		
Hydroquinone $C_6H_4(OH)_2$	Sat'd				140	250	300	C	70		C	185									A				A		A	A		

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CHEMICALS AND FORMULA	CONCENTRATION	PLASTICS AND ELASTOMERS AT MAXIMUM TEMPERATURE (°F)											METALS																	
		ABS	CPVC	PP	PVC	PVDF	TEFLON	EPDM	BUNA-N	HYPALON	NEOPRENE	FLUOROCARBON	ALUMINUM	COPPER	BRONZE (85% Cu)	SILCON BRONZE	ALUMINUM BRONZE	BRASS	GRAY IRON	DUCTILE IRON	CARBON STEEL	3% NI/IRON	NI PLATED DUCTILE	400 SERIES S.S.	316 S.S.	17-4 PH	ALLOY 20	MONEL	STELLITE	HASTELLOY C
Hydroxylamine sulfate $(NH_2OH)_2•H_2SO_4$					140			70			70																			
Hypochlorous Acid HOCl	10%		140	73	140	70	300	70	C			70		C																
Inks							300		70		70	70			A	A	A		C	C	C		C		A		A	A		
Iodine I_2	10%		73	150		150	200	70	70	70	C	70		C	C	C	C	C	C	C	C		C	C	C	C	B	A		A
Iron Phosphate FeH_3PO_4												180		C	C	C	C	C					B	A	A	A	A	C		
Isobutane $(CH_3)_2CHCH_3$							140	C	70	C	C	B to 70		A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Isobutyl Alcohol $(CH_3)_2CHCH_2OH$						250	300	140	70	70	70	140													A		A			
Isooctane $(CH_3)_3CCH_2CH(CH_3)_2$				73		250	300	C	70	200	70	185		A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Isophorone $C(O)CHC(CH_3)CH_2C(CH_3)_2CH_2$						175		C	C			C																		
Isopropyl Acetate $CH_3COCOCH(CH_3)_2$		C					200	70	C	C	C	C		A	A				A	A	A		A	A	A	A	A	A	A	
Isopropyl Alcohol $(CH_3)_2CHOH$		C		180	140	140	300	140	70	200	70	160		A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	
Isopropyl Chloride $CH_3CHClCH_3$						100	200	C	C		C	70																		
Isopropyl Ether $(CH_3)_2CHOCH(CH_3)_2$			C		C	125	140	C	70	C	C	C			A	A		A	A	A	A	A	A	A	A	A	A	A	A	A
JP-3 Fuel							200	C	70	C	C	185		A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
JP-4 Fuel			73		140	200	300	C	70	C	C	300		A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
JP-5 Fuel			73		140	200	300	C	70	C	C	300		A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
JP-6 Fuel							200	C	100	C	C	100		A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Kelp Slurry								C	70	C		100			B	B	B	B	B	B	B		B	A	A	A	A	A	A	
Kerosene		B to 70	185	73	140	280	250	C	140	C	70	300	70	A	A	A	A	A	A	A	A	A	A		A	A	A	A	A	A
Ketchup					73		250	210	140	B to 70		200	C		C	C	C		C	C	C		C	B	A	A	A	A		
Ketones		C	C		C	C	200	C	C	C	C	C			A	A	A		A	A	A		A	A	A	A	A	A	A	
Kraft Liquors		100	185		140		250		70	70	70	100			C	C	C	C	C	C	C		C		A		A			
Lactic Acid $CH_3CHOHCOOH$	25%			150	140	125	300	70		140	140	70			C	C	C	C	C	B	C		B	A	A	A	A	A		
Lactic Acid $CH_3CHOHCOOH$	80%			150	73	125	300	70	C	140		70			C	C	C	C	C	B	C		B	A	A	A	A	A		A
Lard Oil			185	73	140	280	300	C	140	C	70	185		C	C	C	C	C	B	B	B		B		A		A	B		
Latex $(C_2H_6OSi)x$							200	70	70		100	70		A	A				A	A			A		A		A			
Lauric Acid $CH_3(CH_2)_{10}COOH$					140	225	300		70			100							C	C			C		A		A			
Lauryl Chloride $C_{12}H_{25}Cl$							300	140	70			200							C	C			C		A		A			
Lead Acetate $Pb(C_2H_3O_2)_2•3H_2O$	Sat'd		185	180	140	280	300	210	70	100	160	C			C	C			C	C	C		C		A		A	A		
Lead Chloride $PbCl_2$				73	140	250	300	C	100	100	70	140																		
Lead Nitrate $Pb(NO_3)_2$	Sat'd		185	180	140	250	300	175	180		140	225									A				A		A			
Lead Sulfate $PbSO_4$			185	150	140	250	300	210	180	200	140	225			B	B			C	C	C		C		B		B	B		

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		ABS	CPVC	PP	PVC	PVDF	TEFLON	EPDM	BUNA-N	HYPALON	NEOPRENE	FLUOROCARBON	ALUMINUM	COPPER	BRONZE (85% Cu)	SILCON BRONZE	ALUMINUM BRONZE	BRASS	GRAY IRON	DUCTILE IRON	CARBON STEEL	3% NI/IRON	NI PLATED DUCTILE	400 SERIES S.S.	316 S.S.	17-4 PH	ALLOY 20	MONEL	STELLITE	HASTELLOY C
Lemon Oil				C		250	300			140	100	200							C	C			C	B	A	A	A	A		
Ligroin									100	C	70	100																		
Lime Slurry CaO								100	100	160	100				A	A					A				A		A	A		
Lime Sulfur (CaS)x				73	140			210	C	160	100	185			C	C	C	C	A	A	A		A		A		A	A		
Linoleic Acid $CH_3(CH_2)_4HC:CHCH_2CH:CH(CH_2)_7COOH$					140	250	300	C	B to 70	C		140		C	C	C	C	C	C	C	C		C	C	B	B	A	A		A
Linoleic Oil					140	230	300					70																		
Linseed Oil		100	185	150	140	280	300	B to 70	180	200	70	250	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Liqueurs					140					70	70																			
Lithium Bromide LiBr					140	225	300		140			200																		
Lithium Chloride LiCl						250		100	70			140			B	B	B		B	B	C		B		A		A	A		
Lithium Hydroxide LiOH								100	70			140			C	C	C	C	A	A			A		A		A	B		
Lubricating Oil (ASTM #1)			73	C	140	280	350	C	180	C	70	150	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Lubricating Oil (ASTM #2)			73	C	140	280	350	C	180	C	70	150	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Lubricating Oil (ASTM #3)			73	C	140	280	350	C	180	C	70	150	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	
Ludox SiO_2															C	C	C	C	A	A	A		A		A		A	A		
Magnesium Carbonate $MgCO_2$					140	280	225	170	140	140	140	210			B	B			B	B	B		B	A	A	A	A	A		
Magnesium Chloride $MgCl_2$	Sat'd		185	180	140	280	400	170	180	200	160	170		A	A	A	B	B	C	C	C		C	C	C	C	B	A		A
Magnesium Citrate $MgHC_6H_5O_7•5H_2O$					140	250	300	175	180			225																		
Magnesium Fluoride MgF_2								140				200								C			C		B					
Magnesium Hydroxide $Mg(OH)_2$	Sat'd		185	180	140	280	300	170	180	200	160	225		B	C	C	B	B	A	A	A		A	A	A	A	A	A	A	A
Magnesium Nitrate $Mg(NO_3)_2•2H_2O$			185	180	140	280	300	140	70	140	160	225		A	C	C					B			A	A	A	A	B		
Magnesium Oxide MgO								140	140		160				A	A				A			A					A		
Magnesium Sulfate $MgSO_4•7H_2O$			185	180	140	280	300	175	180	140	160	200		A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Maleic Acid HOOCCH:CHCOOH	Sat'd		185	180	140	250	250	70	C		C	200		B	C	C	B	C	C	C	C		C	B	A	B	A	B		A
Malic Acid $COOHCH_2CH(OH)COOH$			185	150	140	250	250	C	100	70	70	200		A	B	B			C	C	C		C	A	A	A	A	A		
Manganese Sulfate $MnSO_4•4H_2O$				150	140	250	300	175	140	180	160	225			A	A	A		C	C	B		C		A		A	A		
Mercuric Chloride $HgCl_2$			140	180	140	250	300	210	140	140	140	185	C	C	C	C	C	C	C	C	C	C	C	C	C	C	B	C		A
Mercuric Cyanide $Hg(CN)_2$	Sat'd				140	250	300	70	70	140	70	70		C	C	C	C	C	C	C	C		C		A		A	C		
Mercuric Sulfate $HgSO_4$	Sat'd				140	230	300	70	70			70		C	C	C	C	C												
Mercurous Nitrate $HgNO_3•2H_2O$	Sat'd				140	230	300	70	C		C	70		C	C	C	C	C	C	C	C		C	A	A	A	A	C		
Mercury Hg			185	150	140	275	300	210	140	140	140	185		C	C	C	C	C	A	A	A		A	A	A	A	A	B		A
Methane CH_4		C			140	275	300	C	180	70	70	185	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A

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Methanol (Methyl Alcohol) CH_3OH		C	C	180	140	280	300	140	140	140	140	C	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Methoxyethyl Oleate $CH_3OCH_2CH_2(OOCC_{17}H_{33})2$					73																										
Methyl Acetate $CH_3CO_2CH_3$						100	300	B to 70	C	C	C	C			B	B			B	B	B		B	B	A		A	A		A
Methyl Acetone C_3H_6O						C		70	C	C		C		A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	
Methyl Acrylate CH_2:$CHOOCH_3$	Tech. Pure					100	300	B to 70	C	C	C	C							C						A		A	A		
Methyl Amine CH_3NH_2			C	C	C	C	300	70			70	100			C	C			A	A	B		A		A		A	C		
Methyl Bromide CH_3Br					C	280	300	C	70	C	C	185			C	C	B		C	C	B				B		B	B		
Methyl Cellosolve $HOCH_2CH_2OOH_3$					C	280		70	C	70	70	C			A	A	B		B	B	B			A	A	A	A	A	A	
Methyl Chloride CH_3Cl	Dry	C			C	280	250	C	C	C	C	70	C		A	A	C	C	A	A	A	A	A	A	A	A	A	A	A	A
Methyl Chloroform CH_3CCl		C	C			125	200	C	C	C	C	70							A	A			A		A		A			
Methyl Ethyl Keytone (MEK) $CH_3COC_2H_5$		C	C	C	C	C	200	70	C	C	C	C		A	A	A	A	A	A	A	A		A	A	A	A	A	A	A	A
Methyl Formate $HCOOCH_3$								100	C	C	70	C			A	A	A		A	A	C		A	A	A	A	A	A		A
Methyl Isobutyl Carbinol $(CH_3)_2CHCH_2CH(CH_3)OH$							200	70	70	70	70	70																		
Methol Isobutyl Keytone $(CH_3)_2CHCH_2COCH_3$		C	C	C	C	C	200	70	C	C	C	C							A						A	A	A	A	A	
Methyl Isopropyl Keytone $CH_3COCH(CH_3)_2$						C	150	C	C	C	C	C																		
Methyl Methacrylate CH_2:$C(CH_3)COOH_3$					73	125	150	C	C	70	C	C									C									
Methyl Sulfate $(CH_3)_2SO_4$					73	280	70																							
Methylene Bromide CH_2Br_2					C	175	250	C	C	C	C	70																		
Methylene Chloride CH_2Cl_2					C	C	250	C	C	C	C	70			B	B	B		B	B	B				A	A	A	A		A
Methylene Chlorobromide CH_2ClBr					C			C	C	C	C	C							A	A					A		A			
Methylene Iodide CH_2I_2					C	200	250					250																		
Methylsulfuric Acid CH_3HSO_4					140	125																								
Milk			70	170		225	400	250	180	200	160	300	C	A	B	B	B	B	C	C	C		C	C	A	A	A	A		
Mineral Oil		70	185	120	140	280	300	C	140	B to 70	70	300	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Molasses				73	140	150	300	100	150	150	150	185		A	A	A	A	A	A	A	A		A	A	A	A	A	A		A
Monochloroacetic Acid $CH_7ClCOOH$	50%		73	73	140	150	200	C	70	C	C	70		C	C	C	C	C	C	C	C		C	C	C	C	B	B		
Monochlorobenzene C_6H_5Cl	Tech. Pure			73		170	200	C	C	C	C	70			A	A			A	A	A	A	A	A	A	A	A	A	A	
Monoethanolamine $HOCH_2CH_2NH_2$					C	C	100	70	70	C	C	185					C		B	B	B		B		A		A	B		
Motor Oil			185	73	140		350	C	180			250	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Morpholine C_4H_8ONH						75	200	70	C	C	C	C			B	B			B	B	B		B	B	B	B	B	B		
Naphtha		B to 70	73	73	140	280	200	C	140	C	C	150	A		A	A	B		A	A	A	A	A	A	A	A	A	A	A	A
Naphthalene $C_{10}H_8$		B to 70			C	200	250	C	C	C	C	170	A		A	A	B		A	A	A	A		A	A	A	A	A	A	A

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CHEMICAL RESISTANCE CHART

CHEMICALS AND FORMULA	CONCENTRATION	PLASTICS AND ELASTOMERS AT MAXIMUM TEMPERATURE (°F)											METALS																
		ABS	CPVC	PP	PVC	PVDF	TEFLON	EPDM	BUNA-N	HYPALON	NEOPRENE	FLUOROCARBON	ALUMINUM	COPPER	BRONZE (85% Cu)	SILCON BRONZE	ALUMINUM BRONZE	BRASS	GRAY IRON	DUCTILE IRON	CARBON STEEL	3% NI/IRON	NI PLATED DUCTILE	400 SERIES S.S.	316 S.S.	17-4 PH	ALLOY 20	MONEL	STELLITE	HASTELLOY C
Natural Gas				73	140	280	300	C	140	140	140	185	A	A	A	A	A	A	A	A	A	A		A	A	A	A	A	A	A
Nickel Acetate $Ni(OOCH_3)_2•4H_2O$					73	250	300	70	70	C		C	C																	
Nickel Ammonium Sulfate $NiSO_4•(NH_4)_2SO_4•6H_2O$							250		140	200	160		C		C	C	C	C	C	C	C				A		A	C		
Nickel Chloride $NiCl_2$	Sat'd		185	180	140	280	406	210	180	200	160	210			C	C	B		C	C	C				A		A	C		A
Nickel Nitrate $Ni(NO_3)_2•6H_2O$	Sat'd				140	280	400	210	180			250	C		C	C			C	C	C			A	A	A	A	C		
Nickel Sulfate $NiSO_4$	Sat'd		185	180	140	280	400	210		200	160	300		A	C	C	B		C	C	C									A
Nicotine $C_{10}H_{14}N_2$					140	70			C	70	C													B	A		A	B		
Nicotinic Acid CsH_4NCOOH					140	250		70			140			A	B	B			C	C	C			B	B	B	B	B		
Nitric Acid HNO_3	10%		185	180	140	175	250	70	C	100	C	185	C	C	C	C	C	C	C	C	C	C		B	A	A	A	C		
Nitric Acid HNO_3	30%	C	180	120	140	125	250	70	C	100	C	160	C	C	C	C	C	C	C	C	C		B	A		A				
Nitric Acid HNO_3	40%	C	100	73	100	125	250	C	C	70	C	140	C	C	C	C	C	C	C	C	C		B	A		A				
Nitric Acid HNO_3	50%	C	73	100	100	125	250	C	C	70	C	185	C	C	C	C	C	C	C	C	C	C		B	A		A			
Nitric Acid HNO_3	70%	C	73	C	73	C	250	C	C	C	C	100	B	C	C	C	C	C	C	C	C	C		C	A		A			
Nitric Acid HNO_3	100%	C		C	C	C	70	C	C	C	C	C	B	C	C	C	C	C	C	C	C	C	C	C	A		A	C		
Nitrobenzene $C_6H_5NO_2$				73	C	73	400	C		C	C	70			B	B			A	A	A				A		A	A		A
Nitroethane $CH_3CH_2NO_2$	Tech. Pure					70			C		C	C								A										
Nitrogen Gas N_2						275	300		140	100	140	185	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	
Nitroglycerin $CH_2NO_3CHNO_3CH_2NO_3$					C	125	70								B	B				B	B				A		A	B		
Nitroglycol					C					70	70																			
Nitromethane CH_3NO_2	Tech. Pure					120		70	C		C														A					
Nitrous Acid HNO_2	10%				73	230	400		C			100	C	C	C	C	C	C	C	C	C			B	B	B	B	C		
Nitrous Oxide N_2O				73	73	C	400		C	B to 140	C	70			B	B			C	B	B				A		A	C		A
n-Octane CH_8H_{18}						275	400	C	B to 70			70	A	A	A	A	A	A	A	A	A	A		A	A	A	A	A	A	A
Oleic Acid $CH_3(CH_2)_7CH:CH(CH_2)_7COOH$			185	150	140	250	250	B to 70	100	70	B to 70	185		A	B	B	A		B	B	C			B	A	A	A	A		A
Oleum $xH_2SO_4•ySO_3$				C	C	C	150	100	C	C	C	70			C	C	C	C	C	C	C				A		A	C		A
Olive Oil						250	350		140	B to 100	140	150		A	A	A	A	A	A	A	A	A		A	A	A	A	A	A	
Oxalic Acid $HOOCCOOH•2H_2O$	50%		185	180	140	125	300	150	C		100	100	C		C	C	C		C	C	C	C	C	B	A	A	A	A		A
Oxygen (Gas) O_2			185	150	140	280	406	210	B to 70	140	140	185	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Ozone O_3					140	225	300	210	C	140	C	185	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Palm Oil						200	200	C	140	C		70			C	C			C	C	C		C		A		A	A		
Palmitic Acid $CH_3(CH_2)_{14}COOH$	10%		73	180	140	250	300	70	100	70	C	185		A	B	B	B	A	B	B	B		B	B	A	A	A	A		
Palmitic Acid $CH_3(CH_2)_{14}COOH$	70%		73	180	73	250	300		100	C	C	185		A	B	B	B	A	B	B	B		B	B	A	A	A	A		

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CHEMICAL RESISTANCE CHART

CHEMICALS AND FORMULA	CONCENTRATION	PLASTICS AND ELASTOMERS AT MAXIMUM TEMPERATURE (°F)											METALS																	
		ABS	CPVC	PP	PVC	PVDF	TEFLON	EPDM	BUNA-N	HYPALON	NEOPRENE	FLUOROCARBON	ALUMINUM	COPPER	BRONZE (85% Cu)	SILCON BRONZE	ALUMINUM BRONZE	BRASS	GRAY IRON	DUCTILE IRON	CARBON STEEL	3% NI/IRON	NI PLATED DUCTILE	400 SERIES S.S.	316 S.S.	17-4 PH	ALLOY 20	MONEL	STELLITE	HASTELLOY C
Paraffin $C_{36}H_{74}$		B to 70			140	250	250	C	100		140	300		A	A	A	A		B	A	A	B	B	A	A	A	A	A	A	A
Peanut Oil						250	250		100			150			A	A			A	A			A		A		A			
n-Pentane $CH_3(CH_2)_3CH_3$		C					100	C	100		70	100	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Peracetic Acid CH_3COOOH	40%				73																									
Perchloric Acid $HClO_4$	10%		140	73	73	200	250	70	C	70	70	70							C						A		A	A		
Perchloric Acid $HClO_4$	70%		185	73		125		70	C	C	C	185							C						B		B	A		
Perchloroethylene $Cl_2C{:}CCl_2$						275	200	C	C	C	C	200			B	B			B	B	B		B	A	A	A	A	A		A
Perphosphate			170	170	140		250	70	70			70																		
Phenol C_6H_5OH		C	73	73	73	125		70	C	C	C	200			A	A	C		C	C	C		C	A	A	A	A	A		A
Phenylhydrazine $C_6H_5NHNH_2$					C	125	B to 70	C	C	C		C																		
Phospate Esters									C		C	100			C	C			C	C			C		A		A	A		
Phosphoric Acid H_3PO_4	10%		210	180	140	275	300	140	70	200	140	200	C	C	C	C	C	C	C	C	C	C	C	B	A	A	A	C		
Phosphoric Acid H_3PO_4	50%		210	180	140	275	300	70	C	200	70	200	C	C	C	C	C	C	C	C	C	C	C	B	A	A	A	C		
Phosphoric Acid H_3PO_4	85%		73	180	140	275	300	70	C	200	C	200	C	C	C	C	C	C	C	C	C	C	C	B	A	B	A	C		
Phosphoric Anhydride P_2O_5			73	73	73	200							B								C				A		A			
Phosphorus (Red)					70	75	300																		A		A			
Phosphorus (Yellow)					73		300																							
Phosphorus Pentoxide P_2O_5			73	73	73	200		140					C				C				B				A		A			
Phosphorus Trichloride PCl_3					C	200	300		C	C	C		C												A		A	A		
Photographic Solutions			185	150	140					100	100	185								C					A		A			
Phthalic Acid $C_6H_4(COOH)_2$					73	200			C	140	C	140		A	A	A			B	B	C		B		A	A	A	B		A
Picric Acid $C_6H_2(NO_2)_3OH$	10%	C	140	170	170	73		140	C	70	70	140	C	C	C	C	C	C	C	C	C	C	C	B	A		A	C		A
Pine Oil									70		C	70			C	C	B		B	B	B		B	A	A	A	A	A		
Plating Solutions (Brass)			185	180	140	200	300	70			100	70																		
Plating Solutions (Cadmium)			185	180	140	200	300	70			100	70																		
Plating Solutions (Chrome)			210	180	140	200	300				160														A		A			
Platings Solutions (Copper)			210	180	140	200	300	70			160	70																		
Platings Solutions (Gold)			185	180	140		300	70			125	70																		
Platings Solutions (Lead)			210	180	140	200	300	70	70		70	70																		
Platings Solutions (Nickel)			210	180	140	200	300	70				70		C		C		C							A		A*			
Platings Solutions (Rhodium)			185	180	140	200	300					70																		
Platings Solutions (Silver)			185	180	140	200	300	70			70	70	A												A		A			

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CHEMICAL RESISTANCE CHART

CHEMICALS AND FORMULA	CONCENTRATION	PLASTICS AND ELASTOMERS AT MAXIMUM TEMPERATURE (°F)											METALS																
		ABS	CPVC	PP	PVC	PVDF	TEFLON	EPDM	BUNA-N	HYPALON	NEOPRENE	FLUOROCARBON	ALUMINUM	COPPER	BRONZE (85% Cu)	SILCON BRONZE	ALUMINUM BRONZE	BRASS	GRAY IRON	DUCTILE IRON	CARBON STEEL	3% NVIRON	NI PLATED DUCTILE	400 SERIES S.S.	316 S.S.	17-4 PH	ALLOY 20	MONEL	STELLITE	HASTELLOY C
Platings Solutions (Tin)			210	180	140	200	300	100				140															A	A		
Platings Solutions (Zinc)			185	180	140	200	300	70				70									B									
Polysulfide Liquor							300	70	70	70	70	100		C	C	C	C	C	B	B			B		B		B	B		
Polyvinyl Acetate						275	350	70	70	70	70	70			B	B	B		A	A	C		A	B	B	B	B	B		
Potash KOH					140	280	400	140	180	180	70	200		B	B	B	B	B	A	A	A	A	A	A	A	A	A	A	A	
Potassium Alum $ALK(SO_4)_2•12H_2O$					140	280	400	210	180	200	160	200																		
Potassium Aluminum Sulphate					140	280	400	210	180	200	160	200	B	B		B		C			C			B	A		A	A		
Potassium Amyl Xanthate					73																									
Potassium Bicarbonate $KHCO_3$	Sat'd		73	170	140	200	400	170	70	200	160	200	A								A				A		A			
Potassium Bichromate $K_2Cr_2O_7$	Sat'd				140	230	400	170	180			300	B	A		A		B			B			B	A		A			
Potassium Bisulfate $KHSO_4$					140	275	400	170	180	140	140	200			B	B	B		C	C	C	C	C		A		A	C		
Potassium Borate $K_2B_4O_7•5H_2O$					140	275	400	170	180	140	140	200								A	A		A		A		A			
Potassium Bromate $KBrO_3$				180	140	275	400		180	140	140	250							C	A	A		A		A		A			
Potassium Bromide KBr				180	140	280	400	170	180	200	160	200			B	B	B		C	C	C				A		A	A		
Potassium Carbonate K_2CO_3		70		180	140	280	400	170	180	200	160	200		B	B	B	B	B	A	A	A	A	A	A	A	A	A	A	A	
Potassium Chlorate $KClO_3$ (Aqueous)				180	140	200	400	140	B to 70	140	100	140		B	B	B			A	A	A	A		A	A	A	A	A	A	
Potassium Chloride KCl			185	180	140	280	400	210	180	200	160	200		B	A	A	B	B	B	B	C	B	B	B	A	A	A	A		A
Potassium Chromate K_2CrO_4					140	280	400	170	140	70	70	200			A	A	B		B	B	B		B		A	A	A	A		
Potassium Cyanide KCN			185		140	280	400	140	180	200	160	185	C	C	C	C	C	C	B	B	B	B		A	A	A	A	A		A
Potassium Dichromate $K_2Cr_2O_7$	Sat'd		185		140	280	400	170	180	200		300			B	B	C		B	B	C			A	A	A	A	A		
Potassium Ethyl Xanthate $KS_2COC_2H_5$					73																									
Potassium Ferricyanide $K_3Fe(CN)_6$					140	280	400	140	70	200	150	140	C		C	C			B	B	C				A		A	A		
Potassium Ferrocyanide $K_4Fe(CN)_6•3H_2O$					140	280	400	140	70	200	150	140	C	C	B	B	C	C	C	C	C			B	A		A	A		
Potassium Fluoride KF					140	275	400	140	180			250													A		A	A		
Potassium Hydroxide KOH	25%		185	150	140	150	400	210	B to 70	140	160	140	C		C	C	C		B	B	B	B		A	A	A	A	A		
Potassium Hypochlorite KClO		C		C		200	400	70	C	70		70			C	C					C				A		A	C		
Potassium Iodide KI				73		250	400	140	100	140	160	180			B	B					B	B			A		A	A		
Potassium Nitrate KNO_3					140	280	400	210	180	140	140	250		A	A	A	B	B	B	B	B	B		A	A	A	A	A	A	A
Potassium Perborate			170	170	140	275	400		70		70																			
Potassium Perchlorate $KClO_4$					140	200	200	140	C	150		150																		
Potassium Permanganate $KMnO_4$	10%			150	140	250	400	210	C	100	100	140			B	B			A	A	A			A	A	A	A	A	A	
Potassium Permanganate $KMnO_4$	25%			150	73	250	400	140	C	100	100	140			B	B			A	A	A			A	A	A	A	A	A	

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		ABS	CPVC	PP	PVC	PVDF	TEFLON	EPDM	BUNA-N	HYPALON	NEOPRENE	FLUOROCARBON	ALUMINUM	COPPER	BRONZE (85% Cu)	SILCON BRONZE	ALUMINUM BRONZE	BRASS	GRAY IRON	DUCTILE IRON	CARBON STEEL	3% NiIRON	NI PLATED DUCTILE	400 SERIES S.S.	316 S.S.	17-4 PH	ALLOY 20	MONEL	STELLITE	HASTELLOY C
Potassium Persulfate $K_2S_2O_8$					140	125	400	210	C	200	140	200																		
Potassium Sulfate K_2SO_4				180	140	280	200	210	140	140	140	250		A	A	A	B	B	A	A	A	A	B	A	A	A	A	A	A	A
Potassium Sulfide K_2S						275	300		100		70	100		C	C	C	C	C	C	C	C	B		B	B	B	B	C		A
Potassium Sulfite $K_2SO_3 \cdot 2H_2O$							300	140	70		70	200			B	B	B		C	C	C				A		A	B		
Potassium Tripolyphosphate $K_5P_3O_{10}$							300		70		70	100	C				B		A		A	A			A		A	A		
Propane C_3H_8			73		140	280	300	C	70	B to 70	70	70	A	A	A	A	A	A	A	A	A	A		A	A	A	A	A	A	A
Propargyl Alcohol $HC{:}CCH_2OH$				140	100	140		140		140	C	140																		
Propionic Acid $CH_3CH_2CO_2H$		C							140	70	C			A											A		A			
Propyl Acetate $C_3H_7OOCCH_3$						100	140	B to 70	C	C	C	C	A					A			A			A	A	A	A	A	A	
Propyl Alcohol $CH_3CH_2CH_2OH$		C		140		140	350	140	140	140	140		A	A	A	A	A	A	A	A	A	A		A	A	A	A	A	A	A
n-Propyl Bromide $CH_3CH_2CH_2Br$							300	B to 70			70	70			B	B	B		B	B	B				A		A	B		
Propylene Dichloride $CH_3CHClCH_2Cl$					C	200		C	C		C	B to 70									A							A		
Propylene Oxide CH_3CHCH_2O					C	C	150	70	C	C	C	C									A				A		A			
n-Propyl Nitrate $C_3H_7NO_3$							200	70	C	C	C	C							A	A			A		A		A			
Pyridine $N(CH)_4CH$				73	C	C		B to 70	C	C	C	C			B	B			B	B	B		B	C	B		A	B		
Pyrogallic Acid $C_6H_3(OH)_3$					73	150	150		70		70				A	A			A	A	A		A	A	A	A	A	A	A	A
Pyrrole $CHNH(CH)_2CH$								C	C	C	C	C			B	B			B	B	B		B		B		B	B		
Quinone $C_6H_4O_2$								100		C		C							A	A			A		A		A			
Rosin							200		70	70	70	100			C	C			C	C	C		C	A	A	A	A	A		
Salicylaldehyde C_6H_4OHCHO					C	125	200	70	70			70																		
Salicylic Acid $C_6H_4(OH)(COOH)$					140	200	300	210	C	70	C	185			B	B			C	C	C		C		A		A	B		
Selenic Acid H_2SeO_4					140	150			70	70	70																			
Silicic Acid $SiO_2 \cdot nH_2O$					140		400	140	100	140	140	200																		
Silicone Oil			150	150	73	250	350	140	140	140	70	185	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Silver Chloride AgCl														C	C	C	C	C	C	C	C		C	C	C	C	A to 70	A		
Silver Cyanide AgCN			185		140	280	350	140	C		70	140		C	C	C	C	C	C	C	C		C		A to 100		A to 70	A		
Silver Nitrate $AgNO_3$		70	185	180	140	280	350	210	140	200	160	250		C	C	C	C	C	C	C	C		C	B	A		A	C		
Silver Sulfate Ag_2SO_4		70			140	250	350	170	140			200																		
Soaps		70	185	73	140		400	210	180	140	140	250			B	B	A		B	B	B		B	A	A	A	A	B		A
Sodium Acetate $NaC_2H_3O_2$	Sat'd		185	180	140	280	400	170	C	70		C			A	A	B		B	B	C		B	B	A		A	A		A
Sodium Alum $AlNa(SO_4)_2 \cdot 12H_2O$					140	280		170	180	140	140	210	C								C									
Sodium Aluminate $Na_2Al_2O_3$	Sat'd						300	200	180	140	140	200			C	C	B		B	B	A		B		A		A	A		A

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CHEMICALS AND FORMULA	CONCENTRATION	PLASTICS AND ELASTOMERS AT MAXIMUM TEMPERATURE (°F)											METALS																	
		ABS	CPVC	PP	PVC	PVDF	TEFLON	EPDM	BUNA-N	HYPALON	NEOPRENE	FLUOROCARBON	ALUMINUM	COPPER	BRONZE (85% Cu)	SILCON BRONZE	ALUMINUM BRONZE	BRASS	GRAY IRON	DUCTILE IRON	CARBON STEEL	3% NiIRON	NI PLATED DUCTILE	400 SERIES S.S.	316 S.S.	17-4 PH	ALLOY 20	MONEL	STELLITE	HASTELLOY C
Sodium Benzoate C_6H_5COONa			140	170	140	280	300	210	140			200																A		
Sodium Bicarbonate $NaHCO_3$		70	185	180	140	280	400	250	180	200	160	300		A	A	A	B	B	A	A	C		A	A	A	A	A	A	A	A
Sodium Bichromate $Na_2Cr_2O_7•2H_2O$	Sat'd		140	140	140	250	400	140	140	70	70	200			C	C								A	A	A	A	A		
Sodium Bisulfate $NaHSO_4$		70		180	140	280		200	180	100	140	250		C	C	C	C	C	C	C	C		C	B	A		A	A		
Sodium Bisulfite $NaHSO_3$			185	180	140	280	400	200	180	200	140	250			B	B			C	C	C		C		A		A	C		A
Sodium Borate (Borax) $Na_2B_4O_7•10H_2O$	Sat'd			73			300	140	70	100	100	140			A	A			B	B			B	A	A	A	A	A		
Sodium Bromide NaBr	Sat'd		180	180	140	280	300	210	70		70	250			B	B			C	C	C		C		A		A	A		
Sodium Carbonate Na_2CO_3		70	185	180	140	280	400	140	140	140	140	300		C	A	A	B	B	A	A	A	A	A		A	A	A	A	B	A
Sodium Chlorate $NaClO_3$	Sat'd			180	73	250	350	B to 140	B to 70		B to 140	100			A	A	C		B	B	B		B	B	A	A	A	C		
Sodium Chloride NaCl			210	180	140	280	350	140	140	100	160	200	B	A	A	A	B	B	B	B	C	A	B	B	B	B	A	A	A	A
Sodium Chlorite $NaClO_2$	25%		73		C	250	200	C	C	140		C																		
Sodium Chromate $Na_2CrO_4•10H_2O$						200		70	70		70	70			A	A			B	B	B		B	A	A	A	A	A		
Sodium Cyanide NaCN			185	180	140	280	350	140	140	140	140	200		C	C	C	C	C	A	A	A	A		A	A	A	A	A		
Sodium Dichromate $Na_2Cr_2O_7•2H_2O$	20%		185	180	140	200	300	140	C	200	C	200			C	C	C		B	B	B				A		A	B		
Sodium Ferricyanide $Na_3Fe(CN)_6•2H_2O$	Sat'd		140	140	100	275	350	140	70			140			C	C			C	C					A		A			
Sodium Ferrocyanide $Na_3Fe(CN)_6•10H_2O$	Sat'd		185		140	275	350	140	70			140													A		A	A		
Sodium Fluoride NaF			140	185	140	280	350	140	70	140	70	140			A	A	B		C	C	C				A		A	A		
Sodium Hydroxide NaOH	15%	140	210	180	140	170	400	210	140	200	160	C	C		A		A			A	A		B	A	A	A	A	A	A	A
Sodium Hydroxide NaOH (Caustic Soda)	30%	140	210	180	140	C	350	140	100	140	160	C	C		A		B			B	B		B	A	A	A	A	A		
Sodium Hydroxide NaOH	50%	140	210	180	140	C	350	140	C	140	160	C	C	B	B	C	C	C	B	B	B	B	B	A	A	A	A	A		
Sodium Hydroxide NaOH	70%	70		180	100	C	350	70	C	100	100	C	C	B	C	C	C	C	B	B	B	B	B	A	A	A	A	A		
Sodium Hypochlorite $NaOCl•5H_2O$		C	185	C	73	200	350	70	C	150	C	140	C	C	C	C	C	C	C	C	C	C	C	C	A		A	A		A
Sodium Iodide NaI						275				140	160																			
Sodium Metaphosphate $(NaPO_3)n$				73		280		70	70	70		70			C	C	C		C	C	C				A		A	B		
Sodium Nitrate $NaNO_3$	Sat'd		185	180	140	280	400	210	140	140	140	225		B	A	A	B	B	A	A	A	A	A	A	A	A	A	A	B	A
Sodium Nitrate $NaNO_2$					140	280	400	170	C	140	140	200			A	A			B	B	B				A		A	A		
Sodium Palmitate $CH_3(CH_2)_{14}COONa$	5%					250	350																							
Sodium Perborate $NaBO_2•3H_2O$				73	140		350	70	70	70	70	70			C	C			B	B	B			A	A	A	A	A		A
Sodium Perchlorate $NaClO_4$		170	170		140	250	350		B to 70																					
Sodium Peroxide Na_2O_2					140	200	250	140	B to 70	200	70	185		B	C	C	C	C	C	C	C			A	A	A	A	A		B
Sodium Phosphate NaH_2PO_4	Acid			180		280	400	170	140	200	140	200		B	B	B	B	B	B	B	B	A	B	A	A	A	A	B		A
Sodium Phosphate NaH_2PO_4	Alka-line			180		280	400	170	140	200	140	200		B	B	B	B	B	B	B	B	A	B	A	A	A	A	B		A

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CHEMICALS AND FORMULA	CONCENTRATION	PLASTICS AND ELASTOMERS AT MAXIMUM TEMPERATURE (°F)											METALS																	
		ABS	CPVC	PP	PVC	PVDF	TEFLON	EPDM	BUNA-N	HYPALON	NEOPRENE	FLUOROCARBON	ALUMINUM	COPPER	BRONZE (85% Cu)	SILCON BRONZE	ALUMINUM BRONZE	BRASS	GRAY IRON	DUCTILE IRON	CARBON STEEL	3% NI/IRON	NI PLATED DUCTILE	400 SERIES S.S.	316 S.S.	17-4 PH	ALLOY 20	MONEL	STELLITE	HASTELLOY C
Sodium Phosphate NaH_2PO_4	Neutral			180		280	400	170	140	200	140	200		B	B	B	B	B	B	B	B	B	A	B	A	A	A	A	B		A
Sodium Silicate $2Na_2O•SiO_2$				180		280		200	140	200	140	200			C	C	B		A	A	A		A	A	A	A	A	A	A	A
Sodium Sulfate Na_2SO_4	Sat'd	70	185	150	140	280	400	140	140	140	140	200		A	A	A	B	B	A	A	A	A	A	A	A	A	A	A	A	A
Sodium Sulfide Na_2S		70	185	150	140	280	350	140	180	200	140	200		C	C	C	C	C	B	B	C	B	B	A	A	A	A	A		
Sodium Sulfite Na_2SO_3		70	185	180	140	280	350	140	140	140	140	200			A	A	C		B	B	B		B	B	A	A	A	C		A
Sodium Thiosulphate $Na_2S_2O_3•5H_2O$				150	140	280	350	200	140	200	160	200	A		B	B	C		C	C	C		C		A		A	A		
Sour Crude Oil					140	280		C	C	70	C	200			C				A	A	A		B	A	A	A	A	A	A	A
Soybean Oil						250	400	C	140	200	70	250			A	A	B		A	A	B	A	A	A	A	A	A	A	A	
Stannic Chloride $SnCl_4$			185		140	280	350	100	140	70	C	200		C	C	C	C	C	C	C	C	C	C	C	C	C	A	C	C	
Stannic Chloride $SnCl_2$	15%		185		140	280	350	70	140	200	160	200			C	C	C	C	C	C	C	C	C		A		A	C		
Starch					140	200	300	170	180	200	160	200			B	B	B	B	B	B	B		B	A	A	A	A	A		
Steam (Low Pressure)						280	400	C	C	C	C	C	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Steam (Medium Pressure)							400	C	C	C	C	C	B	A	A	A	A	A	A	A	A	A	A	A	A	A	A	B		A
Steam (High Pressure)							C	C	C	C	C	C	C	C	C	C	C	C	C	B	A	C	B	A	A	A	A	C		A
Stearic Acid $CH_3(CH_2)_{16}COOH$			185	73	140	275	350	C	140	70	70	100		A	A	A	C	B	C	C	C	B	C	A	A	A	A	A		A
Stoddard's Solvent						280		C	140	C	C	185	A		A	A			A	A	A		A		A	A	A	A	A	A
Styrene $(C_6H_5CHCH_2)n$						180	350	C	C	C	C	100			B	B	B		B	B	B		B		A		A	A		A
Succinic Acid $CO_2H(CH_2)_2CO_2H$				150	140	150	200	70	70			70			A	A			A	A	A		A	A	A	A	A	A	A	A
Sugar $C_6H_{12}O_6$						275	350	140	100	140	140	200			C	C				B	C		B	A	A	A	A	A		
Sulfamic Acid HSO_3NH_2	20%			180	140	C		C	C	70	70	C		A	B	B	B		C	C	C		C		A		A	B		
Sulfate Liquors (Oil)				73			200	70	70			70		C	C	C	C	C	B	A			A		A		A	A		
Sulfite Liquors	6%				140		350	140	70	70	70	140									C	B			A		A			
Sulfur S				C	140	250	350		C	70	70	250	C	C	C	C	C	C	B	B	C	B	B	B	A		A	A		A
Sulfur Chloride S_2Cl_2				C		73	350	C	C	70	C	70	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	B	C	C	
Sulfur Dioxide SO_2	Dry		C	73	140	175	350	70	C	200	C	100	A	A	A	B	A	A	A	A	A		A	A	A	A	A	A	A	A
Sulfur Dioxide SO_2	Wet		C	73	73	150		140	C	200		140	B	C	C	B	B	C						C	A	C	A	A		A
Sulfur Trioxide SO_3					140	C		70	C	C	C	140		C	C			C						C	B	B	A	A		A
Sulfuric Acid H_2SO_4	Up to 30%	100	210	180	140	250	250	140	C	100	100	200		C	C	C	C	C	C	C	C	C	C	C	A	B	A	A	C	A
Sulfuric Acid H_2SO_4	50%	70	210	150	140	250	250	140	140	150	C	200		C	C	C	C	C	C	C	C	C	C	C	A	C	A	A	C	A
Sulfuric Acid H_2SO_4	60%	C	210	150	140	250	250	140	C	150	C	250	C	C	C	C	C	C	C	C	C	C	C	C	B	B	A	B	C	A
Sulfuric Acid H_2SO_4	70%	C	210	120	140	200	200	140	C	150	C	250	C	C	C	C	C	C	C	C	C	C	C	C	B	C	A	C	C	A
Sulfuric Acid H_2SO_4	80%	C	210	73	140	200	200	70	C	150	C	150	C	C	C	C	C	C	C	C	C	C	C	C	C	C	A	C	C	A

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Sulfuric Acid H_2SO_4	90%	C	73	C	100	200	200	C	C	70	C	150	C	C	C	C	C	C	C	C	C	C	C	C	C	C	A	C	C	A
Sulfuric Acid H_2SO_4	93%	C	73	C	100	200	B to 200	C	C	70	C	150	C	C	C	C	C	C	C	C	C	C	C	C	C	C	B	C	C	A
Sulfuric Acid H_2SO_4	94%	C	73	C	100	150	B to 200	C	C	C	C	150	C	C	C	C	C	C	C	C	C	C	C	C	C	C	B	C	C	A
Sulfuric Acid H_2SO_4	95%	C	73	C	100	150	B to 200	C	C	C	C	150	C	C	C	C	C	C	C	C	C	C	C	C	C	C	B	C	C	A
Sulfuric Acid H_2SO_4	96%	C	73	C	100	150	B to 200	C	C	C	C	140	C	C	C	C	C	C	C	C	C	C	C	C	C	C	B	C	C	B
Sulfuric Acid H_2SO_4	98%	C	73	C	C	150	B to 200	C	C	C	C	70	C	C	C	C	C	C	C	C	C	C	C	C	C	C	B	C	C	B
Sulfuric Acid H_2SO_4	100%	C	C	C	C	C	B to 200	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	B	C	B	C	C	
Sulfurous Acid H_2SO_3	Sat'd	C		140	100	210	350	75		150	C	100		C	C	C	C	C	C	C	C	C	C	B	A	A	A	A	C	A
Tall Oil					140	280	250	C	140	C	B to 70	70			B	B	B		B	B	B		B	A	A	A	A	B		A
Tannic Acid $C_{76}H_{52}O_{46}$	10%	C	185	180	140	225	250	70	100	100	100	100			A	A			B	B	C	B	B	B	A	A	A	A		A
Tanning Liquors			185		140				70	70	70	200	A		A	A			B						A		A			
Tar						250	250	C	C	70	70	185	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A		A
Tartaric Acid $HOOC(CHOH)_2COOH$				150	140	250	250	C	70	200	70	70		B	A	A	C	C	C	C	C	C	C	A	A	A	A	A		A
Terpineol $C_{10}H_{17}OH$					C			C	70	C	C																			
Tetrachloroethane $CHCl_2CHCl_2$						250	400	C	C	C	C	70													A		A			
Tetrachloroethylene $Cl_2C:CCl_2$		C				275	350	C	C	C	C	70																		
Tetraethyl Lead $Pb(C_2H_5)_4$					73	280	350	C	70	C		70			A	A				B	B		A				A	A		
Tetrahydrofuran C_4H_8O			C	C	C	C		C	C	C	C	C																		
Tetralin $C_{10}H_{12}$							200	C	C		C	C																		
Tetra Sodium Pyrophosphate $N_{94}PzO_7{\bullet}10H_2O$					140																									
Thionyl Chloride $SOCl_2$					C				C		C																			
Thread Cutting Oils					73	200	350	C	70			70	A		A				A	A	A			A	A	A	A		A	A
Titanium Tetrachloride $TiCl_4$					C	150		C		C	C	185			C	C					C				B		B	B		
Toluene (Toluol) $CH_3C_6H_5$		C	C	C	C	175	200	C		C	C	70	A	A	A	A	A	A	A	A	A	A		A	A	A	A	A	A	A
Tomato Juice				180		200	350	200	C	C	70	200	A		B				C	C	B				A	A	A	A		
Transformer Oil				120	140		300	C	140		C	140	A		A					A	A				A	A	A	A		A
Transformer Oil DTE/30							300	C	140	C	C		A		A					A	A				A	A	A	A		A
Tributyl Citrate					73																									
Tributyl Phosphate $(C_4H_9)_3PO_4$					C	73	300	70	C	C	C	C			B	B	B		A	A	A			B	A		A	A		
Trichloroacetic Acid CCl_3COOH				150	140	125	200	70	B to 70	70	70	C	C		B	C			C	C	C			C	B		B			
Trichloroethylene $CHCl:CCl_2$		C	C	C	C	280	200	C	C	C	C	185	A	A	A	A	A	A	B	B	B			A	A	A	A	A	A	A
Triethanolamine $(HOCH_2CH_2)_3N$		70			73	125		70	70	150	70	C			C	C			C	C	C	C		C	A		A	A		

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CHEMICAL RESISTANCE CHART

CHEMICALS AND FORMULA	CONCENTRATION	PLASTICS AND ELASTOMERS AT MAXIMUM TEMPERATURE (°F)											METALS																	
		ABS	CPVC	PP	PVC	PVDF	TEFLON	EPDM	BUNA-N	HYPALON	NEOPRENE	FLUOROCARBON	ALUMINUM	COPPER	BRONZE (85% Cu)	SILCON BRONZE	ALUMINUM BRONZE	BRASS	GRAY IRON	DUCTILE IRON	CARBON STEEL	3% NiIRON	NI PLATED DUCTILE	400 SERIES S.S.	316 S.S.	17-4 PH	ALLOY 20	MONEL	STELLITE	HASTELLOY C
Triethylamine $(C_2H_5)_3N$					140	125			140		70	200			A	A												A		
Trimethylpropane $(CH_2OH)_3C_3H_5$					73				180	200	160	300																		
Trisodium Phosphate $NaPO_4•12H_2O$		70	185	185	140	280	350	70	70	185	70	185			C	C			B	B		A			A	A	A	A		
Tung Oil								C	100	100	100	100			B	B	B		B	B	B			B	A	A	A	A		A
Turpentine			73	C	140	280		C	70	C	C	150	A	A	A	A	A	A	A	A	A	A		A	A	A	A	A	A	A
Urea $CO(NH_2)_2$			185	180	140	250		210	140	140	140	185		C		B	B			C	C	C				A	A	B	C	
Urine				180	140		400	210	140	140	140	70							C	C	C			A	A	A	A	A		
Varnish						250	350	C	70		C	70		A	A	A	B	B	C	C	C			B	A	A	A	A		A
Vaseline (Petroleum Jelly)				150	C		300	C	140	70	140	70							A	A	A			A	A	A	A	A	A	A
Vegetable Oil			185	100	70	275	300	C	70	70	70	200	A		A	A				A	A			A	A	A	A	A	A	
Vinegar		73	150	140	140	225	300	140	C	200	70	C	C	B	C	C	C	C	C	C	C			A	A	A	A	A		A
Vinyl Acetate $CH_3COOCH:CH_2$				C	C	250	350	70	70	C	C	C			B	B			B	B	B				A		A	B		
Water, Acid Mine H_2O			185		140	230	400	200	180	180	160		C	C	C	C	C	C	C	C	C	C	C	A	A	A	A	B	B	B
Water, Deionized H_2O		70	210	180	140	280	400	200	70		160		A	A	B	B	C	C	C	C	C		C	B	A	A	A	A		A
Water, Distilled H_2O		70	210	180	140	280	400	250	180	200	160		A	A	A	A	B	B	C	C	C	B	C	A	A	A	A	A	B	A
Water, Potable H_2O		70	210	180	140	280	400	250	180	200	160		B	A	A	A	A	A	B	B	B	A	B	A	A	A	A	A	A	A
Water, Salt H_2O		70	210	180	140	280	400	250	180	200	160		C	B	B	B	C	C	C	C	C	B	C	B	A	A	A	A	B	A
Water, Sea H_2O		70	210	73	140	280	400	250	180	200	160		C	B	B	B	C	C	C	C	C	B	C	B	B	A	A	A	C	A
Water, Soft H_2O		70				200	400	250	180	200	160		A	A	A	A	A	B	C	C	B	B	C	A	A	A	A	A	A	A
Water, Waste H_2O		70	185	180	140	230	400	200				70	B	B	B	B	B	B	B	B	B	B	B	B	A		A	A		A
Whiskey			185	150	140	200	350	200	140	140	140	140		A	C	C	B		C	C	C		C	B	A		A	A		A
White Liquor			185		140	230			140	140	140				C	C	C		C	C	C		C		A		A	A		
Wine			185	150	140	200	350	170	140	140	140	140			C	C			C	C	C		C	B	A		A	A		
Xylene (Xylol) $C_6H_4(CH_3)_2$		C	C	C	C	200	350	C	C	C	C	150	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Zinc Acetate $Zn(C_2H_3O_2)_2•2H_2O$						250		180	70	70	160	70			C	C	C	C	C	C	C		C		A		A	A		
Zinc Carbonate $ZnCO_3$									100	100					B	B									B		A	B		
Zinc Chloride $ZnCl_2$			185	180	140	280	400	180	70	200	160	200			C	C	C		C	C	C		C	C	B	B	A	A		
Zinc Nitrate $Zn(NO_3)_2•6H_2O$					140	280		180	140	200		200													A	A	A			
Zinc Sulfate $ZnSO_4•7H_2O$			185	180	140	280	400	180	140	200	140	200		A	C	C	B		C	C	C	B	C	A	A	A	A	A		A

To the best of our knowledge the information contained herein is accurate. However, neither Hytek nor any of its affiliates assumes any liability in whatsoever for the accuracy or completeness of the information contained herein. Final determination of the suitability of any information or material for the use contemplated, the manner of use, and whether there is any infringement of patents is the sole responsibility of the user.

MATERIAL RATING FOR THERMOPLASTICS & ELASTOMERS

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