

CHEMICAL COMPATIBILITY GUIDE

Ratings: A-Excellent, B-Good, C-Poor, D-Do not use, Blank-No information

Media	Chemical Formula	Metals													Elastomers				Polymers								
		Aluminum	Brass	Carbon Steel	Ductile Iron / Cast Iron	316/316Ti/321 S.St	17-4PH	Alloy 20	Monel	Hastelloy C®	Inconel 625	Titanium	Bronze	304 Stainless Steel	Duplex	Buna N (Nitrile)	EPDM/EPR	Viton	Flexible Graphite	Delrin®	Peek®	PVDF	Teflon® and Reinforced Teflon	PCTFE	UHMWPE®	VespeI®	PFA
Acetaldehyde	C ₂ H ₄ O	B	B	C	C	A	A	A	A	A	A	C	A		D	A	D	A	A	B	D	A	A	A		A	A
Acetamine	HCl	B	B	B	B	B			A				B		A							A					
Acetate Solvents	-	A	A	D	B	A	A		A	A		A	B	B	D	A	D	A	D		A	A					B
Acetic Acid (aerated)	C ₂ H ₄ O ₂	C	D	D	C	A			A	A		A	C		C		C	A	D	A		A					
Acetic Acid (air free)	C ₂ H ₄ O ₂	C	D	D	C	A	A	A	A	A		A	C		C		D	A	D	A		A					
Acetic Acid (crude)	C ₂ H ₄ O ₂	C	D	D	D	A	A	A	A	A		A	C		D		D	A	D	A		A					
Acetic Acid Glacial	C ₂ H ₄ O ₂	C	D	D	D	A	B	A	A	A		A	C	C	D	B	C	A	D	A	B	A	A	A			A
Acetic Acid (pure)	C ₂ H ₄ O ₂	C	D	D	D	A	A	A	A	A	A	A	C	D	D		D	A	D	A	C	A					A
Acetic Acid 10%	C ₂ H ₄ O ₂	C	D	D	D	A	A	A	A	A		A	C	C	D	B	D	A	B	A	A	A	A	A	A	A	A
Acetic Acid 80%	C ₂ H ₄ O ₂	C	D	D	D	A	A	A	A	A		A	C	D	D	C	D	A	D	A	C	A			B	A	A
Acetic Acid Vapors	-	B	D			C	C	B	C	A					D			A				A					
Acetic Anhydride	C ₄ H ₆ O ₃	C	D	D	D	B	B	B	B	A		A	C	B	D	C	D	A	D	D	D	A	A	A		A	A
Acetone	C ₃ H ₆ O	A	A	A	A	A	A	A	A	A	A			B	D	A	D	A	B	A	D	A	A	A	A	A	A
Other Ketones	RC(=O)R'	A	A	A	A	A	A	A	A	A					D	B	D		B		D	A					A
Acetyl Chloride	CH ₃ COCl	C	B	A	C	A	A	A	A	A			D	C	D	D	D		D	B	B	A					A
Acetylene	C ₂ H ₂	A	C	A	A	A	A	A	A	A		B	C	A	B	A	A	A	A	B	A	A					A
Acid Fumes	-	B	D	D	D	B		B							C				D		A	A	A				A
Acrylonitrile	C ₃ H ₃ N	B	A	A	C	A	A	A	A	B		B	A	A	D	D	D	B	D	A	B	A					
Air	-	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A				
Alcohol, Amyl	C ₅ H ₁₁ OH	B	B	B	B	A	B	B	B	A		A	B	A	C	A	B	A	A	A	A	A	A			A	A
Alcohol, Butyl	C ₄ H ₉ OH	A	B	B	C	A	B	A	A	A		B	B	A	B	B	A	A	A	A	A	A	A			A	
Alcohol, Diacetone	CH ₃ C(O)CH ₂ C(OH)(CH ₃) ₂	A	B	B	B	A	B	A	B	A		A	B	A	D	A	D	A	A	A	B	A	A			A	B
Alcohol, Ethyl	C ₂ H ₆ O	B	B	B	B	A	B	A	B	A		A	B	A	A	A	A	A	B	A	A	A	A			A	A
Alcohol, Fatty	-	B	B	B	B	A	B	A		A		B			B			A	A		A	A	A			A	
Alcohol, Isopropyl	C ₃ H ₈ O	B	B	B	B	B	B	A	B	A		B	B	B	C	A	A	A	A	A	A	A	A			A	
Alcohol, Methyl	CH ₄ O	C	B	B	B	A	B	A	A	A		A	B	A	B	A	C	A	B	A	A	A	A			A	B
Alcohol, Propyl	C ₃ H ₈ O	B	B	A	B	A	B	A	A	A		A	B	A	B	A	A	A	A		A	A	A			A	
Alumunia	-	A	A						A						A	A			A			A					
Aluminum Acetate	Al(C ₂ H ₃ O ₂) ₃	C	C		C	B	B	A	B	B	A		C		D	A	D		D			A					
Aluminum Chloride (dry)	AlCl ₃	C	D	D	D	C	B	D	B	A		C	D	D	B	A	A	A	C	A	A	A	A	A	A	A	A
Aluminum Chloride Solution	-	B	D	D	D	D	C	B	B	A		B	D	C	B		A	A	D	A	A	A	A	A			A

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		Aluminum	Brass	Carbon Steel	Ductile Iron / Cast Iron	316/316Ti/321 S.St	17-4PH	Alloy20	Monel	Hastelloy C®	Inconel 625	Titanium	Bronze	304 Stainless Steel	Duplex	Buna N (Nitrile)	EPDM/EPR	Viton	Flexible Graphite	Delrin®	Peek®	PVDF	Teflon® and Reinforced Teflon	PCTFE	UHMWPE®	Vespal®	PFA	KEL-F®
Aluminum Fluoride	AlF ₃	C	D	D	D	C	C	B	A	B		C	C	D		A	A	A	A	C		A	A					
Aluminum Hydroxide	AlH ₆ O ₃	B	D	D	D	A	A	A	B	A		B	D	A		A	A	A	A	B		A	A					B
Aluminum Nitrate	AlN ₃ O ₉	D	D	D	D	B	A	A	C	B		A	D	C		B	B	D	A	C		B	A					B
Aluminum Oxalate	C ₆ AlO ₁₂₋₃	B			B	A		A	B	A			D										A					
Aluminum Potassium Sulfate	AlKO ₈ S ₂	B	B	C	D	B	C	B	B	C		A	C	C		B	A	B	A	C		A	A					A
Aluminum Sulfate (Alum)	Al ₂ O ₁₂ S ₃	C	C	D	D	B	B	B	C	B		A	C	B		A	A	A	A	C	A	A	A	A		A	A	A
Amines	R ₃ -xNHx	C	B	B	C	A	A	A	B	A		B	C	A	A	D	C	D	A	D	A	A						A
Ammonia Alum	AlH ₂₈ NO ₂₀ S ₂	C			C	A	B	A	B	A		B	C	B		B			A	C		A						
Ammonia, Anh. Liquid	NH ₃	A	D	A	B	A	A	A	A	B		B	D	B		B	B	D	A	D	A	B	A	A			A	A
Ammonia Aqueous	H ₅ NO	B	C	C	C	A		A	B	A		B	D	A	A	D	B	C	A		A	A	A	A			A	
Ammonia Gas (hot)	H ₃ N	B	C	B	B	B	A	A	A	A		B	D			A		D	D	A		A						
Ammonia Liquor	-	A	C	A	B	B	A	A	A	B			D	C		D	A	D	A	D		A						
Ammonia Solutions	-	B	D	B	C	A	A	A	A	A		B	D			C	A	D	A	D	A	A						
Ammonium Acetate	C ₂ H ₃ O ₂ NH ₄	A	D	D	D	B	A	A	B	A			D	B		C	A	D	A	D		A						
Ammonium Bicarbonate	NH ₄ HCO ₃	B	B	C	C	B		B	B	B				B		B	A	A		B		A						
Ammonium Bromide 5%	NH ₄ Br	D				B		B	B											B		A						
Ammonium Carbonate	(NH ₄) ₂ CO ₃	B	D	B	B	B	B	B	B	B		A	D	B		C	A	B	A	D	A	A	A					
Ammonium Chloride	NH ₄ Cl	C	C	D	D	C	C	B	B	B		C	D	D		B	A	A	A	C	A	A	A				A	A
Ammonium Hydroxide 28%	NH ₄ OH	C	D	C	B	B	A	A	B	B		A	D	B		B	A	B	A	C	A	A	A			B		A
Ammonium Hydroxide Conc.	NH ₄ OH	C	D	C	B	B	A	A	C	B		A	D	A		C	A	B	A	D	A	B	A			D		
Ammonium Monosulfate	-	D				B	A	B	B	B				A						D		A						
Ammonium Nitrate	(NH ₄)(NO ₃)	B	D	D	B	A	A	A	A	A		A	D	A		A	A	B	A	C	A	A	A					A
Ammonium Oxalate 5%	C ₂ H ₈ N ₂ O ₄	A		A	D	A	A	A	B	A			D	A		D	A			B		A						
Ammonium Persulfate	H ₈ N ₂ O ₈ S ₂	D	D	C	D	A	A	A	D	B		B	C	A		D	B	B	A	D		B	A					
Ammonium Phosphate (mono)	(NH ₄) ₃ PO ₄	B	C	D	D	B	A	A	C	A		A	C	C		C	A	A		B	A		A					
Ammonium Phosphate Di-basic	(NH ₄) ₂ HPO ₄	B	C	D	C	B	B	B	C	A		A	D	B		A	A	A	A	B		A	A					A
Ammonium Phosphate Tri-basic	-	B	C	D	C	B	B	B	C	A		A	C	B		A	A	A		B		A						
Ammonium Sulfate	(NH ₄) ₂ SO ₄	C	D	C	C	C	B	A	B	B		A	D	C		B	A	C	A	C	A	A	A					A
Ammonium Sulfide	(NH ₄) ₂ S	B	D	D	D	B	B	B	B	A			D	C		A	A	D		B		A						
Ammonium Sulfite	(NH ₄) ₂ SO ₃	D	C	C	C	A	B	B	D	A			B	B		B	B	C	D	D		A						A
Amyl Acetate	CH ₃ COO(CH ₂) ₄ CH ₃	A	A	C	C	B	A	A	A	A		A	B	A		D	B	C	A	C	A	A	A	A	A		A	B

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Amyl Chloride	C ₅ H ₁₁ Cl	B	B	A	B	B	B	A	A	A		C	A	B		D	D	D	A	A		A	A					A
Aniline	C ₆ H ₇ N	C	D	C	C	A	A	A	B	B		C	C	A		D	B	C	A	B	A	B	A	A	A	D	A	A
Aniline Dyes	-	C	C	C	C	A	A	A	A			C	A		C	B	B		B			A						
Apple Juice	-	B	C	D	D	B		A	A						A	B	A		A	A		A						
Aqua Regia (Strong Acid)	-	D	D	D	D	C	C	B		C		B	D	D		D	D	D	D	D	D	A	A	A	D		A	A
Aromatic Solvents	-	A	A	C	B	A		A	B						D	D	A		A	A	A	A	A				A	
Arsenic Acid	AsH ₃ O ₄	D	C	D	D	B	B	A	A	B		B	C	A		A	B	A	A	D		A	A					
Asphalt Emulsion	-	C	B	B	B	A	A	A	B	A			B	A		D	D	A	A	B	A	A	A					A
Asphalt Liquid	-	C	B	B	B	A	A	A	B	A			A		C	D	A	A	B	A		A						A
Barium Carbonate	CBaO ₃	C	B	B	B	B	A	A	A	A		A	B	B		B	A	A	A	A	A	A	A					A
Barium Chloride	BaCl ₂	D	B	C	C	B	A	A	A	A		A	B	A		A	A	A	A	A	A	A	A					A
Barium Cyanide	Ba(CN) ₂	D	C		C	B	A	B	C	A			C	A		B	A	A		B			A					
Barium Hydrate	BaH ₂ O ₂	D	D			A		A	B										A			A						
Barium Hydroxide	Ba(OH) ₂	D	D	C	C	A	A	A	A	B		B	D	B		A	A	A	A	D	A	A	A					A
Barium Nitrate	Ba(NO ₃) ₂	B	D	A	A	A	B	A		A		A	D	B		A	A	A	A	B			A					A
Barium Sulfate	BaSO ₄	C	B	B	C	B	A	A	A	A		A	C	C		A	A	A	A	B	A	A	A					A
Barium Sulfide	BaS	D	C	C	C	B	A	A	A	A		B	D	C		A	A	A	A	A	A	A	A					
Beer	-	A	B	C	D	A	A	A	A	A	A	A	A	A		B	A	A	A	B	A	A	A	A	A		A	A
Beet Sugar Liquors	-	A	B	B	B	A	A	A	A	A		A	B	A		A	A	A	A	B	A	A	A					A
Benzaldehyde	C ₇ H ₆ O	B	B	B	C	A	A	A	B	A		A	A	C		D	A	D	A	A	A	A	A	A	A	A	A	A
Benzene (Benzol)	C ₆ H ₆	B	A	B	B	B	A	A	A	A	A	A	A	B		D	D	A	A	A	A	A	A	A	A	A	A	B
Benzoic Acid	C ₇ H ₆ O ₂	B	C	D	D	B	A	A	B	A		A	C	B		C	D	A	A	B	A	A	A	A	A	A	A	A
Beryllium Sulfate	BeO ₄ S	B	B		B	B		A	B							B	B	B		A			A					
Bleaching Powder Wet	-		B	C	C	C		B	A					B		D	B	B		B			A					
Blood (meat juices)	-	B	B		D	A	A	A	A	A	A		B	A		A	B	B		B			A					
Borax (Sodium Borate)	Na ₂ B ₄ O ₇ ·10H ₂ O	C	B	C	A	A	A	A	A	A		B	B	A		A	A	A	A	B		A	A		A			A
Bordeaux Mixture	-					A		A	A							A							A					
Borax Liquors	-	C	A	C	C	B		A	B	A						A	A	A		B			A					
Boric Acid	BH ₃ O ₃	C	C	D	D	C	B	A	A	A	A	A	B	B		B	A	A	A	A	A	A	A	A	A	A	A	A
Brake Fluid	-	B	B	A	B	A	A	A	A	A			B	A		D	B	D		B	A		A					
Brines (saturated)	-	C	B	C	C	B	B	B	B	A			A	B	A	A	A	A		A			A	A	A			A

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Bromine (dry)	Br	D	C	D	D	D	C	B	B	A	A	B	D	D	D	D	A	D	D	D	A	A	A	D		A	A
Bunker Oils (Fuel)	-	A	B	A	B	A		A	A	A		A	A		B	C	A		A			A					
Butadiene	C ₄ H ₆	A	B	B	B	A	A	A	A	B		A	C	A		C	C	A	A	A	A	A					A
Butane	C ₄ H ₁₀	A	A	B	C	A	A	A	A	A		A	B	A	A	B	D	A	A	A	A	A		A			A
Butter	-	A			D	A		A				D	C		B	A	A		A			A					
Buttermilk	-	A	D	D	D	A		A	D	A		D	A		A	B	A	A	A	A		A					A
Butyl Acetate	C ₆ H ₁₂ O ₂	B	B	B	B	B	A	A	A	A		B	B	C		D	C	D		B	A	A	A	A	A	A	
Butylene	C ₄ H ₈	A	A	A	A	A	A	A	A	A		A	A		D	D	D	A	A	A	A	A		A			C
Butyric Acid	C ₄ H ₈ O ₂	B	B	D	D	B	A	A	A	A		A	C	C		C	C	C	A	B	A	A	A		A		A
Calcium Bisulfite	CaH ₂ O ₆ S ₂	C	D	D	D	B	B	A	D	B		A	C	B		A	D	A	A	D	A	A	A				A
Calcium Carbonate	CaCO ₃	C	D	C	D	B	A	A	A	A		A	C	A		B	B	A	A	A	A	A		A			
Calcium Chlorate	Ca(ClO ₃) ₂	B	C	B	C	B		A	A	B		B	B	B		B	B	B	B	C		A					
Calcium Chloride	CaCl ₂	D	C	C	C	B	B	A	A	A	A	A	A	B	C		A	A	A	A	D	A	A	A	A	A	A
Calcium Hydroxide	Ca(OH) ₂	C	D	C	C	B	A	A	A	A	A	A	C	B		A	A	A	A	D	A	A	A			D	A
Calcium Nitrate	Ca(NO ₃) ₂	C	B	B	C	B	B	A	A	B		B	B	C		B	B	A	B	D	A	A	A		A	A	B
Calcium Phosphate	Ca ₃ (PO ₄) ₂	D	C		C	B		B								B	B	B		B			A				
Calcium Silicate	Ca ₂ SiO ₄	D	C		C	B		B		A						B	B	B		A			A				
Calcium Sulfate	CaO ₄ S	C	B	B	C	C	A	A	A	B	A	A	B	B		A	B	A	A	D	A	A	A			A	A
Caliche Liquor	-			B		A		A								B				A			A				
Camphor	C ₁₀ H ₁₆ O	C	C	B	C	B	A	A	C			B				B	B	B		A	A		A		A		
Cane Sugar Liquors	C ₁₂ H ₂₂ O ₁₁	B	B	A	B	A	A	A	A	A		A	A		B	A	B		A		A	A					
Carbonated Beverages	-	B	B	D	B	B	B	B	C	A					B	B	B	A	A			A					
Carbonated Water	-	A	D	B	C	A	B	A	B			B	A		A	A	A	A	A			A					
Carbon Bisulfide	CS ₂	B	C	B	B	B	A	B	B	B		B	A		D	D	A		A			A					
Carbon Dioxide (dry)	CO ₂	B	B	B	B	A	A	A	A	A		A	B	A	A	C	B	B	A	A	A	A			A		A
Carbonic Acid	CH ₂ O ₃	A	D	B	D	B	A	A	A	B		B	C	A	B	B	B	A	A	B	A	A	A	A	A	A	A
Carbon Monoxide	CO	A	A	B	B	A	A	A	A	A		A	A		B	B	B	A	A	A	B	A			A		B
Carbon Tetrachloride (dry)	CCl ₄	C	B	C	C	A	A	A	A	A		A	B	B		D	D	B	B	B	A	A	A	A	B	A	D
Carbon Tetrachloride (wet)	CCl ₄	D	C	D	D	B	A	B	B	A		A	C	A		D	D	B	B	B		A	A	A	B	A	B
Casein	-	C	C		C	B		B	C	B						B	B	B		A			A				
Castor Oil	-	A	A	A	A	A	A	A	A	A		B	A		A	B	A	A	A	A		A		A			

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Caustic Potash	HKO	C	C	B	B	A	A	A	A	A					B			A	D	A	A	A	A				
Caustic Soda	HNaO	D	D	B	B	A	A	A	A	A			B	A	C	B	C	A	D	A	A	A	A			A	
Cellulose Acetate	-	B	B		B	B			B	B					D	B	D		C			A				A	
China Wood Oil (Tung)	-	A	C	C	C	A	A	A	A	A				A	A	D	A		A			A					
Chlorinated Solvents	-	C	C	C	C	C		A	B	A			A		D	D	C		A	B		A					
Chlorinated Water		D	D	C	D	C	C	A	C	B		A	C	C	B	C	A	B	D	D	A	A	A				A
Chlorine Gas (dry)	Cl2	C	D	C	B	B	B	B	A	A		C	D	B	C	D	B	A	D	D	A	A	A	B	A	A	D
Chlorobenzene (dry)	C6H5Cl	B	B	B	C	A	A	A	A	A		B	B	A	D	D	A	A	C	C	B	A	A		A	A	B
Chloroform (dry)	CHCl3	C	B	C	C	A	A	A	A	B		A	B	A	D	D	B	A	B	A	C	A	A	B	A	A	C
Chlorophyll (dry)	-	B	B		B	B		A	B	A					B	B	B					A					
Chlorosulfonic Acid (dry)	HSO3Cl	C	C	C	B	C	C	B	A	B		A	C	D	D	D	D	A	D	B	D	A	A	D	A	A	
Chrome Alum	CrKO8S2	C	C	B	C	A		A	B						B	B	B		B			A					
Chromic Acid<50%	CrH2O4	D	D	D	D	C	B	B	C	C		A	D	B	D	C	C	C	D	D	A	A	A	A	D	A	A
Chromic Acid>50%	CrH2O4	D	D	D	D	C	C	B	D	C		B	D	C	D	C	C	C	D	D	A	A	A	A	D	A	B
Chromium Sulfate	Cr2O12S3	B	C		D	B	B	C	B					B	B	B	B		C			A					
Cider	-	B			D	A	A	B	A	A			A	A	A	A	A		A			A					
Citric Acid	C6H8O7	C	D	D	D	C	A	A	A	A		A	D	B	B	B	A	A	C	A	A	A	A	A	A	A	A
Citrus Juices	-	C	B	D	D	B	A	A	A	A					A		A		A			A					
Coca Cola Syrup	-					A		A		A				A	B		B		A	A		A					
Coconut Oil	-	B	B	C	C	A	A	A	B	A			B	A	A	A	A		A	A	A	A		A			
Coffee	-	A	A	C	C	A	A	A	B	A		A	A	A	A	A	A		A			A					
Coffee Extracts (hot)	-	A	A	C	C	A		A	A										A			A					
Coke Oven Gas	-	A	C	B	B	A	A	A	B				B		C	D	B		C			A					
Cooking Oil	-	B	B	B	B	A		A	A	A					A	D	A		A	A		A					
Copper Acetate	C4H6CuO4	D	D	C	D	A		A	B	A			C		C	B	D		C	A	A	A	A				
Copper Carbonate	CCuO3	D				A		A	A										A	A	A	A	A				
Copper Cyanide	CCuN	D	D	C	D	A		A	C	A		A	D	B	A	B	B	A	B	A	A	A	A				
Copper Nitrate	Cu(NO3)2	D	D	D	D	B		A	D	B		B	D	A	A	B	A	A	A	A	A	A	A				A
Copper Sulfate	CuO4S	D	D	D	D	B	A	A	D	A		A	D	B	A	A	A	A	D	A	A	A	A		A		A
Corn Oil	-	B	B	B	C	B	A	A	B	A			B	A	A	C	A		A	A		A		A			
Cotton seed Oil	-	B	B	B	C	B	A	A	B	A		A	B	A	A	C	B		B	A	A	A					

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Media	Chemical Formula	Metals												Elastomers				Polymers										
		Aluminum	Brass	Carbon Steel	Ductile Iron / Cast Iron	316/316Ti/321 S.St	17-4PH	Alloy20	Monel	Hastelloy C®	Inconel 625	Titanium	Bronze	304 Stainless Steel	Duplex	Buna N (Nitrile)	EPDM/EPR	Viton	Flexible Graphite	Delrin®	Peek®	PVDF	Teflon® and Reinforced Teflon	PCTFE	UHMWPE®	VespeI®	PFA	KEL-F®
Cresol	C ₇ H ₈ O	A	C	A	C	B	A	B	B	B		B	A	A		D	D	D	A	D	D	B	A		A			B
Creosote Oil	-	B	B	B	B	A	A	A	B	A		A	B	A		C	D	A		D	A		A		A			
Cresylic Acid	C ₇ H ₈ O	C	B	C	D	B	A	A	A	A		A	C	A		D	D	B	A	D	A	C	A	A			A	
Crude Oil, sour	-	A	C	C	C	B	A	A	B	A	A		D	B	A	A	D	A		A	A		A			A		
Crude Oil, sweet	-	A	B	A	B	A	A	A	A	A	A		B	A	A	A	D	A		A	A		A			A		
Cupric Nitrate	CuN ₂ O ₆	D				A		A	D											D			A					
Cutting Oils, Water Emulsions	-	A	A	B	B	A	A	A		A			A	A		A		A		A	A		A					
Cyanide Plating Solution	-	D	D		D	B		B	D	A						B	B	B		D			A					
Cyclohexane	C ₆ H ₁₂	A	A	A	B	A	A	A	A	A		A	A	A		C	D	A	A	A	A	A	A	A		A	A	
Cyclohexanone	C ₆ H ₁₀ O	A	B	B	B	A	A	A	B	B			B	A		D	B	D	A	A	A	C	A		A			B
Detergents, Synthetic	-	B	B	A	B	B	A	A	A	A		A	B	A		B	B	A	A	A	A	A	A	A		A		
Dextrin	C ₁₈ H ₃₂ O ₁₆	B	A	B	B	B		A	B				A			B	B	B		A			A					
Dichloroethane	C ₂ H ₄ Cl ₂	B	B		C	A	B	B	B	A			B	D	B		D	D	B	A	B	A	A					A
Dichloroethyl Ether	C ₄ H ₈ Cl ₂ O	B	B	A	B	B		B		A			B	A		D	C	D		C	A		A		D			
Diesel Oil Fuels	-	A	A	A	A	A	A	A	A	A		C	A	A	A	A	D	A	A	A	A	B	A	A	A			B
Diethylamine	C ₄ H ₁₁ N	B	C	C	B	A	A	A	B	A			B	A	A		B	C	D	A	B	A	B	A				A
Diethyl Benzene	-					B		B								D	D	A		C			A					
Diethylene Glycol	C ₄ H ₁₀ O ₃	B	B	A	A	A	B	A	B	B		A	A	B		A	A	B	A	B	A		A					
Diethyl Sulfate	(C ₂ H ₅) ₂ SO ₄	A	B	A	B	B		B	B	A			A			C	C	B		A	A		A					
Dimethyl Formamide	C ₃ H ₇ NO	B	B	B	B	A	A	A	A	A			C	A		B	B	D		C	A	A	A			D		A
Dimethyl Phthalate	C ₁₀ H ₁₀ O ₄					A										B	B	D		C	A		A					
Dioxane	C ₄ H ₈ O ₂	B	A	A	B	B	A	B	A	A			A			D	C	D	A	C	A		A					
Dipentane (Pinene)	C ₁₀ H ₁₆	A	A		A	A		A					A	A		B	D	B		A			A					
Disodium Phosphate	HN _a 2O ₄ P	B	B		B	B		A	B				B			B		B		A			A					
Dowtherm	C ₂₄ H ₂₀ O	A	A	B	B	A	A	A	A	A			A	A		D	D	A	A	A	B		A					
Drilling Mud	-	B	B	A	A	A	A	A	A	A			B	A	A		B	A	A		A			A				
Dry Cleaning Fluids	-	A	C	B	B	A		A	A							B	A	B		D			A					
Drying Oil	-	C	C	C	B	B		B	B							B	A			A			A					
Enamel	-		A														A			B			A					
Epsom Salts	MgO ₄ S	B	A	C	A	B	A	B	B	B		A	B	A		B	A	A	A	B			A					A
Ethane	C ₂ H ₆	A	B	B	A	A	A	B	B	A			A	A	A	A	D	A	A	B	A		A					

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Media	Chemical Formula	Metals													Elastomers				Polymers								
		Aluminum	Brass	Carbon Steel	Ductile Iron / Cast Iron	316/316Ti/321 S.St	17-4PH	Alloy 20	Monel	Hastelloy C®	Inconel 625	Titanium	Bronze	304 Stainless Steel	Duplex	Buna N (Nitrile)	EPDM/EPR	Viton	Flexible Graphite	Delrin®	Peek®	PVDF	Teflon® and Reinforced Teflon	PCTFE	UHMWPE®	Vespal®	PFA
Ethers	H ₂ O	B	A	B	B	A	A	A	A	B		A	B	A	A	D	C	C	A	C	A	C	A	A		A	C
Ethyl Acetate	C ₄ H ₈ O ₂	B	B	B	B	B	A	A	A	B		A	B	B		D	C	D	A	A	A	B	A		A		B
Ethyl Acrylate	C ₅ H ₈ O ₂	B	B	A	B	A	A	A	A			A	A		D	C	D		B	A		A					
Ethyl Benzene	C ₈ H ₁₀	A		A	B	B	B	A	A	A			B	B		C	D	A		A	A		A				
Ethyl Bromide	C ₂ H ₅ Br	B	A		B	B		C	B				B		B	B	B		A			A					
Ethyl Chloride (dry)	C ₂ H ₅ Cl	B	B	B	B	A	A	A	A	C		A	B	A		C	C	B	A	B	A	B	A				B
Ethyl Chloride (wet)	C ₂ H ₅ Cl	D	C	C	D	B	B	B	B	C			C	C		C	B	B		B	A		A				
Ethylene Chloride	C ₂ H ₄ Cl ₂	B			C	A	B	A	A	B		B	A	B		D	D	D	A	B		B	A		A		B
Ethylene Dichloride	C ₂ H ₄ Cl ₂	B	B	B	A	A	A	A	A	C		B	B	B		D	D	D	A	C	A	B	A		B	A	B
Ethylene Glycol	C ₂ H ₆ O ₂	A	B	B	B	A	A	A	B	A		A	B	B	A	A	A	A	B	A	A	A		A	A		A
Ethylene Oxide	C ₂ H ₄ O	D	D	B	C	B	B	A	B	A			B	B		D	C	D	A	C	A	A	A				A
Ethyl Ether	C ₄ H ₁₀ O	B	B	A	B	A	B	A	A	B		A	B	B		D	D	D		B	A	B	A				B
Ethyl Silicate	C ₈ H ₂₀ O ₄ Si	B	B		B	B		B	B	A					B	B	B		A			A					
Ethyl Sulfate	C ₄ H ₁₀ O ₄ S	A				D		B						D		B	C	A	A	A		A	A				A
Fatty Acids	R-COOH	C	C	D	D	B	A	A	A	A		A	C	B		B	D	A	A	B	A	A	A	A	A		A
Ferric Hydroxide	FeH ₃ O ₃	C			D	A		A	A	B						B				A			A				
Ferric Nitrate	FeN ₃ O ₉	D	D	D	D	B	A	A	D	A		A	D	B		A	A	A	A	D	A	A	A				A
Ferric Sulfate	Fe ₂ O ₁₂ S ₃	D	C	D	D	B	A	A	D	B		A	D	B		A	A	A	A	D	A	A	A			A	A
Ferrous Ammonium Citrate	C ₆ H ₅ (5+4y)Fe(x)N(y)O ₇	B				B		B												A			A				
Ferrous Chloride	Cl ₂ Fe	D	D	D	D	D	D	D	D	C		A	C	D		A	A	A	A	D	A	C	A				C
Ferrous Sulfate	FeH ₂ O ₄ S	C	C	D	D	B	A	A	A	B		A	C	B		A	A	A	A	D	A	A	A	A		A	A
Ferrous Sulfate (Saturated)	-	C	C	C	C	A		A	B	B		A				C	B	B	A	B			A				
Fertilizer Solutions	-	D	C	A	A	A	A	B	B	A			D	A		B	A	A			A		A				
Fish Oils	-	B	B	A	B	A	A	A	A	A			A	A		A	D	A		A			A				
Flue Gases	CO	C	B	A	B	A	A	A	A	A			A			C	D	C		C			A				
Fluoboric Acid	BF ₄ H	C			C	B	B	A	A	A		D	C	B		A	A	A	A	B		B	A			A	B
Fluorosilicic Acid	F ₆ H ₂ Si	D	B	D	D	B	B	A	A	B		D	B	C		C	C	C	A	B		C	A		A		C
Formaldehyde (cold)	CH ₄	B	B	B	B	A	A	A	A	A		B	B	B		B	B	D	A	A	A	A	A	A	A	A	A
Formaldehyde (hot)	CH ₄	B	B	C	D	C	B	B	B	B				B		B				A	A	A	A	A	A	A	
Formic Acid (cold)	CH ₂ O ₂	B	D	D	D	B	A	A	A	A	B	B	C	C		D	A	B	A	C	B	A	A	A	A	A	B
Formic Acid (hot)	CH ₂ O ₂	B	D	D	D	B	B	B	B	B	B	C				D		A	A	D	B	A	A	A	A	A	

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Media	Chemical Formula	Metals													Elastomers				Polymers								
		Aluminum	Brass	Carbon Steel	Ductile Iron / Cast Iron	316/316Ti/321 S.St	17-4PH	Alloy20	Monel	Hastelloy C®	Inconel 625	Titanium	Bronze	304 Stainless Steel	Duplex	Buna N (Nitrile)	EPDM/EPR	Viton	Flexible Graphite	Delrin®	Peek®	PVDF	Teflon® and Reinforced Teflon	PCTFE	UHMWPE®	Vespele®	PFA
Freon Gas (dry)	-	B	A	B	B	A	A	A	A	B			A		C	C	C	A	A			A					
Freon 11, MF,112, BF	CCl3F	D	A	B	C	A	A	A	A		B	B	A		C	C	C	A	D	D	A	A					A
Freon 12, 32, 114, 115	CCl2F2	B	A	B	B	A	A	A	B	A		B	B	B	B	B	B	A	B	A	C	A					C
Freon 21, 31	CHCl2F	B	A	B	C	A	A	A	B	A			B	C	D	D	D	A	A								
Freon 22	CHClF2	D	A	B	C	A	A	A	B	A		B	B	A	D	D	D	A	A	A	A	A					A
Freon 113, TF	C2Cl3F3	D	A	B	C	A	A	A	B	A		C	B	C	B	D	D	A	A	B		B			A		
Freon (wet)	-	D	B		D	C	B	B	B	B					B	B	D	A	B			A					
Fruit Juices	-	B	D	D	D	A	A	A	B	A	A	A	B	A	A	A	A		C	A	A	D	A	A		A	A
Fuel Oil	-	B	B	A	B	A	A	A	B	A		A	A	A	A	D	A	A	A	A	A	B					A
Fumaric Acid	C4H4O4							A							B	B	A		A			A					
Furfural	C5H4O2	A	A	A	B	A	A	A	A	A		A	B	A	D	C	D	A	B	A	D	A					D
Gallic Acid 5%	C7H6O5	B	C	D	D	B	B	B	B	A		B	B	B	B	C	A	B	A	B	A	A					A
Gas, Manufactured	-	C	B	B	B	B		B	A					A	A		A		A	A		A					
Gas, Natural	-	B	B	B	B	A	A	B	A					A	A	D	A		A	A		A					
Gas, Odorizers	-	A	A	B	B	B		A	B					A	A	B		A				A					
Gasoline (aviation)	-	A	A	A	B	A	A	A	A	A				A		C	D	A	A	A		A		A			A
Gasoline (leaded)	-	A	A	A	A	A	A	A	B	A		A	A	A		C	D	A	A	A	A	B	A		A		A
Gasoline (motor)	-	A	A	A	B	A	A	A	B	A						C	D	A	A	A		A		A			
Gasoline (refined)	C12H13N5O6S2	A	B	B	B	A		A	B	A						C	D	A	A	A		A		A			
Gasoline (sour)	-	A	B	B	B	A		A	C	A						C	D	A	A	A		A		A			
Gasoline (unleaded)	-	A	A	A	B	A	A	A	B	A		A	A	A		C	D	A	A	A	A	B	A		A		A
Gelatine	-	A	C	D	D	A	A	A	B	A		A	B	A		A	A	A	A	B		A	A	A		A	
Glucose	C6H12O6	A	A	B	B	A	A	A	A	A		A	A	A		A	A	A	A	A	A						
Glue	-	A	A	A	B	B	A	A	A	A		A	A	A		A	B	B	A	A		A					
Glycerine (Glycerol)	C3H8O3	A	B	B	B	B	A	A	A	A		A	A	A		C	A	A	A	A	A		A	A		A	A
Glycol Amine	-	C	D	A	B	B	A	A	A	B					A	D	C	A	C								
Glycol	C2H6O2	B	B	B	B	B	A	A	A	B					A	A	A		C	A	A	A	A	A		A	
Graphite	CH4	B	B		C	B		A	B						B	B	B		A			A					
Grease	-	B	B	A	A	A	A	A	A	A					B	A		A	D	A		B					
Helium Gas	He	B	B		B	A		A	B	A					A	A	B	B	B		A						
Heptane	C7H16	A	A	A	A	A	A	A	A	A		A	A	A		A	D	A	A	A	A	A			A		A

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Hexane	C ₆ H ₁₄	A	A	A	A	A	A	A	A		A	A	A		A	D	A	A	A	A	A						A	
Hexanol, Tertiary		A	A	A	A	A	A	A	A			A	A		A	D	B		A			A						
Hydraulic Oil Petr. Base	-	A	B	A	A	A	A	A	A			A	A		A	D	A	B	B	A		A		A				
Hydrazine	H ₄ N ₂	C	D	C	D	B	A	A	B	A		C	A		C	B	C	A	B	D	A	A		A	D	A		
Hydrocyanic Acid	CHN	C	D	D	C	A	B	A	B	A		B	D	B		B	B	A	A	C	D	A	A		A	A		
Hydrofluoric Acid 20%	HF	D	D	D	D	D	C	B	A	B		D	C	D		D	D	A	A	D	D	B	B	A	C		B	
Hydrofluoric Acid 50%	HF	D	D	D	D	D	D	C	B	C		D	C	D		D	D	B	A	D	D	B	B	A	C		B	
Hydrofluoric Acid 75%	HF	D	D	D	D	D	D			C		D	C	D		D	D	B	A	D	D	B	A	A	C		B	
Hydrofluoric Acid 100%	HF	D	D	D	D	D	D			B		D	C	D		D	D	B	A	D	D	A	A	A	C		A	
Hydrofluosilicic Acid	H ₂ SiF ₆	D	B	D	D	C	B	B	B	C		D	B	C		B	B	A	B	B		B	A				B	
Hydrogen Gas (cold)	H	A	A	B	A	A	A	A	A	A		A	A	A	A	B	B	A		A	A	B	A				B	
Hydrogen Gas (hot)	H	C		B		B		A		A					B	B			A			A						
Hydrogen Peroxide Conc.	H ₂ O ₂	C	D	D	D	B	A	A	C	B	A	B	D	B		D	C	B	C	D	A	B	A	A	A		A	B
Hydrogen Peroxide, Dilute	H ₂ O ₂	C	D	D	D	B	A	A	B	A	A	B	D	B		A	B	A	B	D	A	A	A	A	A		A	A
Hydrogen Sulfide (dry)	H ₂ S	C	C	C	C	C	B	B	B	B		A	D	C		C	A	D	A	C	A	B	A	A	A	A	A	B
Hydrogen Sulfide (wet)	H ₂ S	C	C	C	D	C	C	B	C	B		B	D	C		C	B	D	A	C	A	B	A	A	A	A	A	B
Hypo (Sodium Thiosulfate)	Na ₂ S ₂ O ₃	B	C	D	D	B	A	B	B			B	B		C	A	A		A	A		A					A	
Illuminating Gas	-	A	A	A	A	A		A	A						A	D	A		A			A						
Ink-Newsprint	C ₁₁ H ₁₆ O ₃ P+	C	C	D	D	A	B	A	B	A			B	C		A	B	A		B			A					
Iodoform	CHI ₃	C	C	B	C	A	A	A	C	B		B	C	A		D	A	A		A			C					
Iso-Butane	C ₄ H ₁₀	A	A	B	A	A	A	A	A	A			A	A		B	D	A		A	A		A					
Iso-Octane	C ₈ H ₁₈	A	A	A	B	A	A	A	A	A			A	A		A	D	A	A	A	A	B	A		A		B	
Isopropyl Acetate	C ₅ H ₁₀ O ₂	B		B	C	B	A	A	A	A			B	B		D	D	D	A	D	A		A					
Isopropyl Ether	C ₆ H ₁₄ O	A	A	A	B	A	A	A	A	A			A	A		C	D	D	A	D	A	B	A		A		A	
JP-4 Fuel	-	A	A	A	A	A	A	A	A	A		A	A	A		A	D	A	A	A	A	A	A				A	
JP-5 Fuel	-	A	A	A	A	A	A	A	A	A		A	A	A		B	D	A	A	A	A	A	A				A	
JP-6 Fuel	-	A	A	A	A	A	A	A	A	A			A	A		A	D	A	A	A	A	A	A				A	
Kerosene	-	B	A	B	B	A	A	A	A	A		A	A	A	A	A	D	A	A	A	A	A	A		A		A	
Ketchup	-	C		C	C	A	A	A	A				C			A		A		A	A		A					
Ketones	CH ₂ O	B	A	A	A	A	A	A	A	A		A	A	A		D	D	D	A	D	A	D	A	A			C	
Laquer (and Solvent)	-	A	C	D	C	B	B	A	A	A		B	A	B		D	D	D	A	D	A		A					

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Media	Chemical Formula	Metals													Elastomers				Polymers									
		Aluminum	Brass	Carbon Steel	Ductile Iron / Cast Iron	316/316Ti/321 S.St	17-4PH	Alloy20	Monel	Hastelloy C®	Inconel 625	Titanium	Bronze	304 Stainless Steel	Duplex	Buna N (Nitrile)	EPDM/EPR	Viton	Flexible Graphite	Delrin®	Peek®	PVDF	Teflon® and Reinforced Teflon	PCTFE	UHMWPE®	VespeI®	PFA	KEL-F®
Lactic Acid Concentrated (cold)	C ₃ H ₆ O ₃	C	D	D	D	A	A	A	A	B		A	D	B		B	B	A	A	C	A	B	A	A	A	A		B
Lactic Acid Concentrated (hot)	C ₃ H ₆ O ₃	C	D	D	D	B	B			B		A	D	B		C	C	B	A	C	A	C	A	A	A	A		
Lactic Acid Dilute (cold)	C ₃ H ₆ O ₃	B	D	D	D	A	A	A	A	A		A	C	B		B	A	A	A	B	A	B	A		A	A		B
Lactic Acid Dilute (hot)	C ₃ H ₆ O ₃	B	D	D	D	A	B			B		A	C	B		C	C	B	A	B	A	C	A		A	A		
Lactose	C ₁₂ H ₂₂ O ₁₁	B	B		C	B		B	B							B	B	B		A			A					
Lard	-	A	B		A	A	A	A	B	A		A	A	A		B	C	A	A	A		A	A					
Lard Oil	-	B	B	C	C	B		A	B	A			C	A		A	B	A		A	A		A					
Lead Acetate	C ₄ H ₆ O ₄ Pb	D	C	C	D	B	B	B	B	B		A	C	B		A	B	D	A	B	A	A	A			A	A	
Lead Sulfate	O ₄ PbS	D	C	C	D	B	B	B	B	B			B	C		B	B	B	A	A			A					
Lecithin	C ₄₆ H ₈₉ NO ₈ P+	B	C	C	C	B		B	B	A			A	A		D	D	B		A			A					
Linoleic Acid	C ₁₈ H ₃₂ O ₂	B	C	C	B	B	B	A	A	A			C	B		B	D	B	A	B	A	A	A					
Linseed Oil	-	A	A	A	A	A	A	A	A	A	A		A	B	A		A	D	A		A	A			A			
Lithium Chloride	CLi	C	B	C	B	B	A	A	A	A			B	A		B	B	B	A	A	A	A	A					
Liquid Petroleum Gas (LPG)	C ₃ H ₇ NO ₂	A	A	A	B	B		B	B	A			A	A		A	D	A		A	A		A					
Lubricating Oil Petroleum Base	C ₆ H ₆	A	A	A	A	A	A	A	A	A		A	A	A		A	D	A	A	A	A	A	A					
Ludox	O ₂ Si	C	D	A	B	B	A	A	A	A			C			B	B	B		B			A					
Magnesium Bisulfate	HMgO ₄ S+	D	B	B	B	A	A	A	B				A	A		B	B	B	B	A			A					
Magnesium Bisulfade	-	C	D		D	B		B	B							B	B	B		A			A					
Magnesium Carbonate	CMgO ₃	A	B	B	B	A	A	A	A	B		A	B	B		B	B	B		A	A	A	A					
Magnesium Chloride	Cl ₂ Mg	D	C	C	D	C	D	C	B	A		A	B	D		A	A	A	A	A	B	A	A		A	A		A
Magnesium Hydroxide	H ₂ MgO ₂	D	B	B	B	A	A	A	B	A		A	B	B		A	A	A	A	A	A	A	A					A
Magnesium Hydroxide (hot)	H ₂ MgO ₂	D	C	B	B	A	A	A	A	B				B		B		A		A			A					
Magnesium Nitrate	MgN ₂ O ₆	B	C	B	B	A		A	B	A		A	C	B		B	A	B		A	A	A	A					
Magnesium Sulfate	MgO ₄ S	B	B	B	B	A	A	A	B	B		A	C	A		A	A	A	A	A	A	A	A					A
Maleic Acid	C ₄ H ₄ O ₄	B	B	C	C	B	B	A	B	B		A	B	A		B	D	A	A	A	A	A	A	A	A	A	A	
Maleic Anhydride	C ₄ H ₂ O ₃	B	B		B	B	A	B	B	A				A		D	D	B		D		A	A					
Malic Acid	C ₄ H ₆ O ₅	B	B	D	D	B	A	B	B	B	A	A	C	A		A	D	A	B	A		A	A		A			
Malt Beverages	-					A		B	A							A	B	A		A			A					
Manganese Carbonate	-	B				B		A								B				A			A					
Manganese Sulfate	MnO ₄ S	B	D	B	D	A	B	A	A	A		A	A	B		B	B	B	A	B	A	A	A					B
Mayonnaise	-	D		D	D	A	B	A	B	A			D	B		A		A		A		A	A					

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Media	Chemical Formula	Metals												Elastomers				Polymers										
		Aluminum	Brass	Carbon Steel	Ductile Iron / Cast Iron	316/316Ti/321 S.St	17-4PH	Alloy 20	Monel	Hastelloy C®	Inconel 625	Titanium	Bronze	304 Stainless Steel	Duplex	Buna N (Nitrile)	EPDM/EPR	Viton	Flexible Graphite	Delrin®	Peek®	PVDF	Teflon® and Reinforced Teflon	PCTFE	UHMWPE®	Vespel®	PFA	KEL-F®
Meat Juices	-	B	D			A	A								B				A		A	A	A				A	
Melamine Resins	C ₃ H ₆ N ₆		D		D	C	C	C		A			D	C		B	A	A	C	A		A						
Methanol	CH ₄ O	A	A	A	A	A	A	A	A		B	A	A		B	D	B	A	A	A	A	A		A				
Mercuric Chloride	Cl ₂ Hg	D	D	D	D	D	D	C	D	B		A	D	D		A	A	A	C	B	A	A	A	A		A	B	
Mercuric Cyanide	C ₂ HgN ₂	D	D	D	D	B	C	A	D	A		A	D	C		A	B	A		A	B	A	B				D	
Mercurous Nitrate	HgNO ₃	D	D	D	D	A	A	A	D	A		A	D	A		B		B	C	A	B	A	A					
Mercury	Hg	C	D	A	A	A	A	A	B	A		A	A	A		A	A	A	C	A	A	A	A	A	A		A	A
Methane	CH ₄	A	A	A	A	A	A	A	A	A			A	A	A	A	D	A	B	A	A	A	A					
Methyl Acetate	C ₃ H ₆ O ₂	A	A	B	B	A	A	A	A	A			B	A		D	B	D	A	B	A	C	A				A	
Methyl Acetone	C ₄ H ₈ O	A	A	A	A	A	A	A	A	A			A	A		D	A	D	B	D		D	A					
Methyl Amine	CH ₅ N	B	C	B	B	A	A	A	C	B			D	A		D	B	D		A	A		A					
Methyl Bromide 100%	CH ₃ Br	C	C	C	D	B	B	B	B	B			D	B		B	D	A	A	D	B	A						
Methyl Cellosolve	C ₃ H ₈ O ₂	B	A	B	B	A	A	A	A	A			A	B		C	B	D	A	D	A	A						
Methyl Cellulose	-					A		A		B						D				C			A					
Methyl Chloride	CH ₃ Cl	D	C	A	B	A	A	A	A	A		A	B	A		D	D	B	A	C		A	A			A		B
Methyl Ethyl Ketone	C ₄ H ₈ O	B	A	A	A	A	A	A	A	A		A	A	A		D	B	D	A	B	B		A		A		B	
Methylene Chloride	CH ₂ Cl ₂	C	B	B	B	A	A	A	A	A		B	B	B		D	D	C	A	B	A	C	A		B		A	A
Methyl Formate	C ₂ H ₄ O ₂	B		C	B	A	A	A	A	A			A	A		D	B	D		A			A					
Methyl Isobutyle Ketone	C ₆ H ₁₂ O	B			B	B	A	A	A	A		A	A	A		D	C	D	A	C	B	D	A				A	
Milk & Milk Products	-	C	C	C	D	A	A	A	A	A	A		A	B	A		A	A	A	A	A	A	A	A	A		A	A
Mineral Oils	-	A	A	A	B	A	A	A	A	A		A	A	A		A	D	A		A	A		A		A			
Mineral Spirits	-	A	B	B	B	B	A	B	B	B		B	B	A		A	D	A	A	A	A		A				A	
Mixed Acids (cold)	-	D	D	C	C	B		B	C							D	D	B		D			A					
Molasses, crude	-	B	B	A	A	A	A	A	A	A		A	A	A		A	B	A	A	A	A	C	A	A	A			A
Molasses, Edible	-	A	B	A	C	A	A	A	A	A			A	A		A	B	A	A	A	A	B	A	A	A			A
Molybdc Acid	H ₂ MoO ₄					A		A												A			A					
Monochloro Benzene (dry)	C ₆ H ₅ Cl	B		B	A	A	A	A	A	A			B	B		D	D	B	A	C	B		A					
Morphine	C ₁₇ H ₁₉ NO ₃	B	B	B	B	A		A	B							D	B	D		A			A		A			
Mustard	C ₄ H ₈ Cl ₂ S	B	A	B	B	A		A	A	A		A	B	A		A	A	A	A	C		A	A					
Naptha	-	A	A	A	B	A	A	A	A	A		A	A	A		B	D	A	A	B	A	A	A	A	A		A	A
Napthalene	C ₁₀ H ₈	A	B	A	B	A	A	A	A	A		A	A	A		D	D	A	A	B	A	A	A		A		A	A

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Media	Chemical Formula	Metals													Elastomers				Polymers								
		Aluminum	Brass	Carbon Steel	Ductile Iron / Cast Iron	316/316Ti/321 S.St	17-4PH	Alloy20	Monel	Hastelloy C®	Inconel 625	Titanium	Bronze	304 Stainless Steel	Duplex	Buna N (Nitrile)	EPDM/EPR	Viton	Flexible Graphite	Delrin®	Peek®	PVDF	Teflon® and Reinforced Teflon	PCTFE	UHMWPE®	VespeI®	PFA
Natural Gas, Sour	-	B	A	A	B	A	A	A	B	A		A	A		A	D	A		B	A		A					
Nickel Ammonium Sulfate	H ₈ N ₂ NiO ₈ S ₂	D	D	D	D	A		A	C			D			A	B	B		C	A		A	A				
Nickel Chloride	Cl ₂ Ni	D	D	D	D	B	B	A	C	A		A	D	D	A	B	A	A	A	A	A	A	A				A
Nickel Nitrate	N ₂ NiO ₆	D	D	D	D	B	A	A	C	B		B	C	B	A	A	A	A	C	A	A	A	A				A
Nickel Sulfate	NiO ₄ S	D	D	D	D	B	B	A	B	C		B	C	B	A	B	A	A	B	A	A	A	A				A
Nicotinic Acid	C ₆ H ₅ NO ₂	A	A	C	C	A		A	B			B			D	D	B		C			A		B			
Nitric Acid 10%	HNO ₃	C	D	D	D	B	A	A	D	B		A	D	A	C	B	A	A	D	A	A	A	A	A	D	A	B
Nitric Acid 30%	HNO ₃	D	D	D	D	B	B	A	D	A		A	D	A	C	C	A	C	D	B	B	A	A	A		A	B
Nitric Acid 80%	HNO ₃	D	D	D	D	B	C	A	D	B		B	D	A	D	D	B	D	D	D	B	A	A	B		A	B
Nitric Acid 100%	HNO ₃	B	D	D	D	B	C	A	D	B		B	D	A	D	D	B	D	D	D	B	A	A			A	B
Nitric Acid Anhydrous	-	B	D	D	C	B	D	A	D			D	B		D	D	A	C	D			A					
Nitrobenzene	C ₆ H ₅ NO ₂	B	D	A	B	A	B	A	B	B		A	B	B	D	C	C	B	B	D	B	A	A	A	A	A	B
Nitrogen	N ₂	A	A	A	A	A	A	A	A	A		A	A	A	A	B	A	A	A	A	A	A					
Nitrous Acid 10%	HNO ₂	D	D	D	D	B	B	B	D	C			C	B	C	A	A		B	B	B	A					B
Nitrous Gases	-	B	D	B	C	A		A	D										B			A		A			
Nitrous Oxide	N ₂ O	B	B	B	C	B	B	B	D	B			C	B	B	A	A	B	A	A	D	A					
Oils&Fats	-	B				A		A							B	D			A		A	A	A				A
Oils&Animal	-	A	A	A	A	A		A	B	A					A	B	B		A		A	A	A				A
Oils, Petroleum (refined)	C ₆ H ₆	A	B	A	B	A	A	A	A	A			C	A	A	A	D		B	A		A					
Oils, Petroleum (sour)	C ₆ H ₆	A	C	B	C	A	A	A	A	A			C	A	A	A	D		B			A					
Oils, Water Mixture	-	A	A	B	B	A	A	A	A	A			A	A		A	D	A		A	A						
Olaic Acid	-	B				B		B	A	A						C			D			A					
Oleic Acid	C ₁₈ H ₃₄ O ₂	B	D	C	C	B	A	A	B	B		B	C	A	B	D	C	A	C	A	A	A			A		B
Oleum	H ₂ O ₄ S	C	C	B	D	B	B	B	C	B		D	D	B	D	C	A	C	D	D	D	A			D		A
Oleum Spirits	-	D	D		D	B		B	D						C	D	A		D		C	A					
Olive Oil	-	A	B	B	A	A	A	A	A	A		A	A	A	A	B	A	A	A	A		A	A			A	
Oxalic Acid	C ₂ H ₂ O ₄	C	C	C	D	B	B	B	B	B		A	C	B	C	B	A	A	C	C	A	A	A	A	A	A	D
Oxygen	O ₂	A	A	A	A	A	A	A	A	A		A	A	A	A	B	A	A	A	D	A		A				
Ozone (dry)	O ₃	A	A	A	A	A	A	A	A	A			A	B	D	A	B	C	C	A	B	A	A	B		A	A
Ozone (wet)	O ₃	B	B	B	C	A		A	A	A			B		D	B	B		C	A	B	A	A	B		A	
Paints & Solvents	-	A	A	A	A	A		A	A					A	D	D	B		A			A					

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		Aluminum	Brass	Carbon Steel	Ductile Iron / Cast Iron	316/316Ti/321 S.St	17-4PH	Alloy 20	Monel	Hastelloy C®	Inconel 625	Titanium	Bronze	304 Stainless Steel	Duplex	Buna N (Nitrile)	EPDM/EPR	Viton	Flexible Graphite	Delrin®	Peek®	PVDF	Teflon® and Reinforced Teflon	PCTFE	UHMWPE®	VespeL®	PFA
Palmitic Acid	C ₁₆ H ₃₂ O ₂	B	C	C	C	B	A	A	A	A		B	B		B	B	A	A	A	A	B	A					
Palm Oil	-	A	B	C	C	B	A	A	A	A		A	C	A	B	D	A		D	A	A	A					
Paper Pulp	-	C	B		B	A		A	B						B	B	B		A								
Paraffin	C _n H _{2n+2}	A	A	B	B	A	A	A	A	A		A	A	A	A	D	A	A	A	A	A	A	A	A		A	
Paraformaldehyde	CH ₂ O	B	B	B	B	B		B	B	A					B	C			A			A					
Paraldehyde	C ₆ H ₁₂ O ₃					B		B		A					B	D		A	A			A					
Pentane	C ₅ H ₁₂	A	A	B	B	B	A	A	A	B			B	B	A	D	A	A	B	A	A	A					
Perchloroethylene (dry)	C ₂ Cl ₄	B	C	B	B	A	A	A	B	A		A	B	B	D	D	A	A	B	A	A	A					A
Petrolatum (Vaseline Petr. Jelly)	-	B	B	C	C	B	A	A	A	A			A	A	A	A	A	A	B		A	A					
Phenol	C ₆ H ₆ O	A	D	C	D	A	A	A	A	A	A	B	A	B	D	B	B	A	C	D	B	A	A	A	A	A	B
Phosphate Ester 10%	-	C	D	A	C	A		A	A	A					D	A			A			A		A			
Phosphate Acid 10%	-	C	D	D	D	C	B	B	D						B	B	A	A	D			A		A			
Phosphoric Acid 50% (cold)	H ₃ O ₄ P	D	D	D	D	C	B	B	D	B		B	D	D	B	B	A	A	D	A	B	A	A	A	A	A	A
Phosphoric Acid 50% (hot)	H ₃ O ₄ P	D	D	D	D	C	C	B	D	B		C	D	D	B	B	A	A	D	A	B	A	A	A	A	A	A
Phosphoric Acid 85% (cold)	H ₃ O ₄ P	D	D	D	D	C	C	B	D	B		B	D	D	C	B	B	A	D	A	B	A	A	A	A	A	A
Phosphoric Acid 85% (hot)	H ₃ O ₄ P	D	D	D	D	C	D	B	D	B		C	D	D	C	B		A	D	B	B	A	A	A	A	A	A
Phosphoric Anhydride	P ₂ O ₅	C		D		A	B	A				D	C	B	D		D	A	D	A	D	A					
Phosphorus Trichloride	PCl ₃	C		B	C	A	A	A	A	B		A		A	D	B	B	A	D			A		A			A
Phthalic Acid	C ₈ H ₆ O ₄	C	B	D	C	B	A	A	B	A		A	B	B	C	C	A	B	C	A	B	A	A	A	A	A	
Phthalic Anhydride	C ₈ H ₄ O ₃	B	B	D	C	B	A	B	A	A			B	A	C	B	A	A	C	A	A	A					
Picric Acid	C ₆ H ₃ N ₃ O ₇	C	D	D	D	B	B	B	D	B		A	C	B	C	B	A	A	B	A	B	A				A	A
Pineapple Juice	-	A	C	C	C	A		A	A						A		A		A			A					
Pine Oil	-	B	B	B	B	A	A	A	A	A		A	C	A	A	D	A		D		A	A					
Pitch (Bitumen)	C ₆ H ₆					A		A							C	D			A			A					
Polysulfide	-	C	D		B	B		A	B						B	B	B		C			A					
Polyvinyl Acetate	C ₆ H ₁₂ O ₂	B	B	C	B	B	B	B	B	A			B	A		B			A	A		A					
Polyvinyl Chloride	C ₂ H ₃ Cl	B	D		B	B		B	B							B			A			A					
Potassium Bicarbonate	CHKO ₃	C		A	D	A	B	A	B	B		A	C	B	B	A	A	A	B	A	B	A			D		A
Potassium Bichromate	Cr ₂ K ₂ O ₇	B	B	B		A		A	A						B		B		B	C		A		A			
Potassium Bisulfate	HKO ₄ S	B		C	C	A		A	C				C		B	B	A		A			A					
Potassium Bisulfite	HKO ₄ S	C	C	D	D	B		B	D						A	B	A		A			A					

CHEMICAL COMPATIBILITY GUIDE

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Media	Chemical Formula	Metals													Elastomers				Polymers									
		Aluminum	Brass	Carbon Steel	Ductile Iron / Cast Iron	316/316Ti/321 S.St	17-4PH	Alloy20	Monel	Hastelloy C [®]	Inconel 625	Titanium	Bronze	304 Stainless Steel	Duplex	Buna N (Nitrile)	EPDM/EPR	Viton	Flexible Graphite	Delrin [®]	Peek [®]	PVDF	Teflon [®] and Reinforced Teflon	PCTFE	UHMWPE [®]	VespeI [®]	PFA	KEL-F [®]
Potassium Bromide	BrK	C	C	C	D	A	B	B	B	B	A	C	B		A	B	A	A	A	A	A							A
Potassium Carbonate	CK ₂ O ₃	C	B	B	B	A	A	A	A	A	A	C	B		A	B	A	A	B	A		A				D		
Potassium Chlorate	ClKO ₃	B	B	B	B	A	A	A	A	A	A	C	B		A	B	A	B	B	A	A	A						A
Potassium Chloride	KCl	D	C	C	B	B	B	A	B	A	A	C	B		A	A	A	A	A	A	A	A		A				A
Potassium Chromate	CrK ₂ O ₄	B	B	B	B	B	A	A	A	A		A	B		B	B	A	A	C		B	A						
Potassium Cyanide	KCN	D	D	B	B	B	A	A	A	A	A	D	B		A	A	A	A	C		A	A		A				A
Potassium Dichromate	Cr ₂ K ₂ O ₇	B	D	C	C	B	A	A	A	B	A	C	B		A	B	A	B	B	A	A	A				D		A
Potassium Ferricyanide	C ₆ FeK ₃ N ₆	C	D	C	C	A	B	A	A	B	A	D	B		A	B	A	A	C	A	B	A						B
Potassium Ferrocyanide	C ₆ FeK ₄ N ₆ +4	C	C	C	C	B	A	A	A	B	A	C	B		A	A	A	A	A	A	A	A						A
Potassium Hydroxide Dilute (cold)	HKO	D	D	B	D	B	A	A	A	A	B	C	D	B	A	A	D	B	C	A	A	A				D		B
Potassium Hydroxide to 70% (cold)	HKO	D	D	C	D	B	B	B	A	B	C	D	B		B	B	D		C	A		A				D		
Potassium Hydroxide Dilute (hot)	HKO	D	D	B	D	B	C	B	A	A	D	D	B		B	A			D	A		A				D		
Potassium Hydroxide to 70% (hot)	HKO	D	D	C	D	B	C	B	A	B	D	D	B		C	B			D	A		A				D		
Potassium Iodide	IK	B	C	B	B	B	A	A	B	B	A	D	A		A	B	A	B	A		B	A						
Potassium Nitrate	KNO ₃	B	B	B	B	B	A	A	A	A	A	B	B		A	B	A	B	B	A	A	A				A		
Potassium Oxalate	C ₂ K ₂ O ₄	B			A	B	B	A		A	A	A	B					B	A			A						
Potassium Permanganate	KMnO ₄	B	B	B	B	A	A	A	A	A	A	B	B		A	B	A	C	C	A	A	A		A		D		
Potassium Phosphate (mono)	KH ₂ PO ₄	D	C		C	B	A	B	B	B			A		A	A	A		A			A						
Potassium Phosphate Di-basic	K ₂ HPO ₄	B	B	A	A	A		A	B	B					A	B	A		A			A						
Potassium Phosphate Tri-basic	K ₃ PO ₄	D		A	A	B		B	B						B	B						A						
Potassium Sulfate	K ₂ O ₄ S	B	C	B	B	A	A	A	A	A	A	B	B		A	A	A	A	B	A	A	A						B
Potassium Sulfide	HK ₂ S+	C	D	D	C	A	B	B	D	B	A	D	B		A	B	A	A	A	A	A	A						A
Potassium Sulfite	K ₂ O ₃ S	B	B	D	C	A	B	A	C	B	A	C	B		B	A	A		A			A						
Producer Gas	-	B	B	B	B	B	A	B	A				A		A	D	A		A			A						
Propane Gas	C ₃ H ₈	A	A	A	A	A	A	A	B	A	A	B	A	A	A	D	A	A	B	A	A	A						A
Propyl Bromide	C ₃ H ₇ Br	B	B	B	B	A		A	B			B			B	B	B		A			A						
Propylene Glycol	C ₃ H ₈ O ₂	C	B	B	B	B	A	A	A	A	A	A	B		A	B	A	A	B	A		A		A				
Pyridine	C ₅ H ₅ N	B	B	B	B	B	A	A	C	B	B	B	B		D	B	D	A	B	B	D	A	A	A	A	A	B	
Pyrolgalic Acid	-	B	B	B	B	B	A	A	A	A	A	A	B		A	B	A	A	D	A	A	A						A
Quench Oil	-	A	B	B	B	A		A		A					A		A		A			A						
Quinine Sulfate (dry)	C ₄₀ H ₅₀ N ₄ O ₈ S				A	A	B	A	B	A			B						A			A						

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		Aluminum	Brass	Carbon Steel	Ductile Iron / Cast Iron	316/316Ti/321 S.St	17-4PH	Alloy 20	Monel	Hastelloy C®	Inconel 625	Titanium	Bronze	304 Stainless Steel	Duplex	Buna N (Nitrile)	EPDM/EPR	Viton	Flexible Graphite	Delrin®	Peek®	PVDF	Teflon® and Reinforced Teflon	PCTFE	UHMWPE®	Vespel®	PFA	KEL-F®
Resins & Rosins	-	A	A	A	A	A	A	A	A						B		A		A			A						
Resorcinol	C ₆ H ₆ O ₂	A	B	C	C	A	A	A	A		A	B	A		D		B		B			A						
Road Tar	C ₂ H ₄ O ₃	A	A	A	A	A	A	A							B		A		A			A						
Roof Pitch	-	A	A	B	B	A		A									A		A			A						
Rosin Emulsion	C ₁₅ H ₂₀ O ₆	A	A	A	A	A	A	A	A		A	A	A		D		C		C	A		A						
R P-1 Fuel	-	B	B	C	C	B		A	B	A					A	B	A		B			A	A					
Rubber Latex Emulsions	-	C	C	D	D	A	B	B	C	A		A	B	B		A	B	B	A	C	A	A	A				B	
Rubber solvents	-	B	B	C	C	B		A	A			A	B	A		A		A		A		A	A					
Salad Oil	-	B	B		D	B	B	B	B	B		A	B	B		A	A	B	A	A		A	A					
Salicylic Acid	C ₇ H ₆ O ₃					B		B												C			A					
Salt (NaCl)	NaCl+H ₂ O	B	D	C	D	B	B	B	A	A	A	A	C	B	A	A	B	A	A	A		A	A	A	A		A	A
Salt Brine	NaCl	C	C	C	D	B	A	B	B	A			C	B	B	A	B	B		B	A		A					
Sauerkraut Brine	-	A	B	A	B	A	A	A	A	A			A	A		A	A	A	A	A		A						
Sea Water	-	B	B		B	B		B							B		B	A	A	A	A	A	A		A		A	
Sewage	-	D				C	C	A	B	A			D	D						D			A					A
Shellac	-	D	D	D	D	B		B	B	A			D		B		B		D			A						
Silicone Fluids	Si	D	D	D	D	A	B	A	D	A		A	D	B		C	A	A	A	A	A	A	A	A		A	A	
Silver Bromide	AgBr	B				A		A		A					A	A	A					A						
Silver Cyanide	C _{Ag} N	C	B	B	B	A	A	A	B	A		A	B	A		A	A	A	A	A	A	B	A					
Silver Nitrate	C _{Ag} N	B	B	C	C	B	B	A	B	A		A	B	B		B	A	D	A	B	A	A	A				A	
Silver Plating sol.	-	D	B	B	C	A	A	B	B	B		B	B	A		A	A	A	A	B	A		A					
Soap Solutions (Stearates)	C ₂₁ H ₄₂ O ₄	B				B		B	A	A		A	A		B		B	A	B	A	B	A		A				
Sodium Acetate	C ₂ H ₄ O ₂	C	B	C	C	B	A	A	A	A		A	B	A		A	A	A	A	A	A	A	A			D		A
Sodium Aluminate	AlNaO ₂	B				A	A	A	A	B			C		D				C	A	A		A					
Sodium Benzoate	C ₇ H ₆ O ₂	D	D	D	D	A	A	A	B	B		B	C	A		A	B	A	A	B		A	A				A	
Sodium Bicarbonate	CHNaO ₃	C	B	D	D	A	B	B	C	B		A	B	B		A	B	A	A	C		A	A					
Sodium Bichromate	Cr ₂ Na ₂ O ₇	C	B	C	C	B	A	A	A	A		B	A	B		A	B	A		A		A	A		A			
Sodium Bisulfate 10%	H ₂ NaO ₄ S	D	B	C	D	B	B	B	B	B		A	B	C		A	B	A	A	A	A	B	A					B
Sodium Bisulfite 10%	HNaO ₃ S	D	B	D	D	A		B	B	B						A	B	A		D			A					
Sodium Borate	C ₁₅ H ₂₂ O ₂	B	B	C	C	B		B	B							A	B	A		A			A		A			
Sodium Bromide 10%	BrNa	B	B	C	D	B		B	B							A	B	A		A			A					

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		Aluminum	Brass	Carbon Steel	Ductile Iron / Cast Iron	316/316Ti/321 S.St	17-4PH	Alloy20	Monel	Hastelloy C®	Inconel 625	Titanium	Bronze	304 Stainless Steel	Duplex	Buna N (Nitrile)	EPDM/EPR	Viton	Flexible Graphite	Delrin®	Peek®	PVDF	Teflon® and Reinforced Teflon	PCTFE	UHMWPE®	VespeI®	PFA
Sodium Carbonate (Soda Ash)	CNa ₂ O ₃	D	B	B	B	B	A	A	B	A		A	B	A		A	B	A	A	B	A	A	A	A	D	A	A
Sodium Chlorate	CINaO ₃	C	B	B	C	B	A	B	C	B		A	B	A		A	B	A	C	A	A	A					
Sodium Chloride	CINa	B	C	B	C	B	B	B	B	A		A	B	B		A	A	A	A	B	A	A	A		A		A
Sodium Chromate	CrNa ₂ O ₄	B	C	B	B	A	A	A	A	B			B	B		A	B	A	B	D	A	A	A				A
Sodium Citrate	C ₆ H ₅ Na ₃ O ₇	D				A		B	A										A			A					
Sodium Cyanide	CNNa	D	D	B	B	A	B	A	B	A		A	D	A		A	A	A	A	A		A	A			A	A
Sodium Ferricyanide	C ₆ FeN ₆ Na ₃	B			C	B	B	A	B	B			C	B					A			A				A	
Sodium Fluoride	FNa	B	C	D	D	B	B	A	B	A		A	B	D		A	B	A	A	A	A	A					
Sodium Hydroxide 20% (cold)	NaOH	D	C	A	A	A	A	B	A	A	A	A	B	B		A	B	B	A	B	A	A	A		A	D	A
Sodium Hydroxide 20% (hot)	NaOH	D	C	B	B	A	B	B	B	A	A		B			B	B	C	A	C		A	A		A	D	
Sodium Hydroxide 50% (cold)	NaOH	D	D	A	B	A	A	B	A	A		A	D	B		A	B	C	A	C	A	A	A		A	D	B
Sodium Hydroxide 50% (hot)	NaOH	D	D	B	B	A	B	B	B	B			D			B	C	C	A	C		A	A		A	D	
Sodium Hydroxide 70% (cold)	NaOH	D	D	C	B	A	A	B	A	A		A	D	C		B	C	D	A	D	A	A	A		A	D	A
Sodium Hydroxide 70% (hot)	NaOH	D	D	C	B	A	B	B	B	B			D			D	C	D	A	D		A	A		A	D	
Sodium Hypochlorite (Bleach)	CINaO	D	D	D	D	D	D	D	D	A		C	D	D		B	C	B	B	D	B	A	A		A	D	A
Sodium Hyposulfite	Na ₂ S ₂ O ₄	B				B		B	B										A			A					
Sodium Lactate	C ₃ H ₅ NaO ₃	D				A		A	B										A			A					
Sodium Metaphosphate	Na ₆ O ₁₈ P ₆	C	D	C	B	B	A	A	B	A			B	A		A	A	A	A	B	A	A	A				
Sodium Metasilicate (cold)	Na ₂ O ₃ Si	D	B	B	C	A	A	A	A	A			A	A		B	B	B		D	A		A				
Sodium Metasilicate (hot)	Na ₂ O ₃ Si	D	B	C	D	A	A	A	A	A									D			A					
Sodium Nitrate	NNaO ₃	B	B	B	B	A	B	A	B	B		A	B	B		C	A	A	C	A	A	A	A		A	A	A
Sodium Nitrite	NNaO ₂	A		B	B	B	A	A	B	B			B	A		C	A	B		B	A		A				
Sodium Perborate	BNaO ₃	C	D	B	C	C	A	A	A	A			B	B		C	A	A	C	B	A		A				A
Sodium Peroxide	Na ₂ O ₂	C	C	C	D	B	A	A	A	B			D	A		C	A	A	A	D	A	A	A	A	B		A
Sodium Phosphate (mono)	NaH ₂ PO ₄	D	C	B	D	B	A	A	B	A		A	C	B		B	A	A		B	A		A				
Sodium Phosphate Di-basic	Na ₂ HPO ₄	D	C	C	C	B	A	B	B	A		A	C	A		A	A	A	A	A	A		A				
Sodium Phosphate Tri-basic	Na ₃ PO ₄	D	C	C	C	B	A	B	B	A		A	C	A		B	A	A		A			A				
Sodium Polyphosphate	Na ₆ O ₁₈ P ₆	D	D		D	B	B	B	B	A		A	C	B		B	A	A	A	B		A	A				A
Sodium Salicylate	C ₇ H ₅ NaO ₃				A	A		A									A			C		A					
Sodium Silicate	Na ₂ O ₃ Si	B	C	B	B	B	A	A	A	A		A	D	A		A	A	A	A	C	A	A	A	A	A		A
Sodium Silicate (hot)	Na ₂ O ₃ Si	C	D	C	C	B	B	B	B	B			D			B		A	C			A		A		A	A

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Sodium Sulfate	Na2O4S	A	B	B	B	A	A	A	A	A	A	B	B		A	A	A	A	B	A	A	A			A		A
Sodium Sulfide	HNaS	D	D	C	B	B	A	A	A	B		A	D	B		A	A	A	A	B	A	A	A	A		A	B
Sodium Sulfite	NaO3S-	C	C	B	A	A	A	A	C	A		A	B	B		A	A	B	A	A		A	A				A
Sodium Tetraborate	C15H22O2	C	D		A	A	A	A		B			B	A		A	A	A	A	B			A				
Sodium Thiosulfate	Na2S2O3	A	D	C	C	B	A	B	B	B		A	B	A		A	A	A	A	C	A	A	A				A
Soybean Oil	-	B	B	C	C	A	A	A	A	A		A	A	A		A	B	A		D			A				
Starch	C27H48O20	B	B	B	B	A	A	A	A	A			B	A		A	C	A		A	A	A	A	A		A	A
Steam (212°F)	-	B	B	A	A	A	A	A	A	A			B	A	A	D	B	C	A	D	A		A				
Stearic Acid	C18H36O2	B	C	C	C	B	A	A	A	A		A	B	B		A	B	A	A	A	A	A	A		A		
Styrene	C8H8	A	A	B	B	A	A	A	A	A			B	A		D	D	B	A	A	A		A				
Sugar Liquids	-	A	A	B	B	A	A	A	A	A		A	A	A		A	A	A	A	A	A	A	A				
Sugar, Syrups & Jam	-	B	B	B	C		A	A	A	A		A	C	A		A		A	A	A	A	A	A			A	
Sulfate Black Liquor	H2O4S	D	C	C	C	B	A	B	B	B			D	B		C	A	B	A	D	A	A	A	A			
Sulfate Green Liquor	H2O4S	D	C	C	C	B	A	B	B	B			D	B		C	A	B	A	D	A	A	A	A			
Sulfate White Liquor	H2O4S	D	C	C	C	B	B	B	C	B			D	B		C	A	B	A	D	A	A	A	A			
Sulfur	S	C	C	C	C	B	A	A	B	A			D	A		D	C	B	A	B	A	A	A	A		A	
Sulfur Chloride	SCl	D	D	D	D	D	D	C	D	B		D	C	D		D	C	A	C	D	A	B	A				A
Sulfur Dioxide (dry)	SO2	B	B	B	B	A	A	B	B	A		A	B	C		D	B	A	A	B	A	A	A	A	A	A	A
Sulfur Dioxide (wet)	SO2	B	D			B	C	B	A	A		A	D	D		D	B		A	B	A	B	A	A	A	A	A
Sulfur Hexafluoride	SF6	A	B			A		A		C						B	B	B		D	A		A				
Sulfur, Molten	-	A	D	C	B	B	A	A	C	B				A		D	B	B		D			A				
Sulfur Trioxide	SO3	A	D	B	B	B	B	A	A	A		C	C	A		D	B	B	C	D	A	D	A		D		A
Sulfur Trioxide (dry)	SO3	A	C	B	B	B	B	B	B	B		D	B	D		D	B	A	D	D			A		D		A
Sulfuric Acid 0 to 77%	H2SO4	D	D	D	D	C	C	B	C	A		C	D	D		B	C	A	B	D	D	A	A	A	A	B	A
Sulfuric Acid 100%	H2SO4	D	D	C	C	C	C	B	C	B		D	D	C		D	C	B	D	D	D	A	A	A	A	D	A
Sulfurous Acid	H2O3S	C	D	D	D	B	B	B	B	B		A	D	B		C	C	A	A	C	B	B	A		A		A
Tall Oil	-	C	B	B	B	A	A	A	A	A			B	A		B	D	A		A			A	A			
Tannic Acid (Tannin)	C27H24O18	C	B	C	C	B	B	B	B	B		A	B	B		B	A	A	A	B	A	B	A	A	A	A	A
Tanning Liquors	C27H24O18	A	A			A	A	A	A	A		A	A	A		B	B	A	A	B			A				
Tar & Tar Oils	C2H4O3	B	A	A	A	A	A	A	A	A			A	A		C	D	A		A	A		A	A			
Tartaric Acid	C4H6O6	B	D	D	D	A	A	A	A	B		A	B	C		C	B	A	A	B	A	B	A	A	A	A	A

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Ratings: A-Excellent, B-Good, C-Poor, D-Do not use, Blank-No information

Media	Chemical Formula	Metals													Elastomers				Polymers									
		Aluminum	Brass	Carbon Steel	Ductile Iron / Cast Iron	316/316Ti/321 S.St	17-4PH	Alloy20	Monel	Hastelloy C®	Inconel 625	Titanium	Bronze	304 Stainless Steel	Duplex	Buna N (Nitrile)	EPDM/EPR	Viton	Flexible Graphite	Delrin®	Peek®	PVDF	Teflon® and Reinforced Teflon	PCTFE	UHMWPE®	VespeI®	PFA	KEL-F®
Tetraethyl Lead	C ₈ H ₂₀ Pb	B	B	B	C	B	A	A	A			A	A		B	D	A		A	A		A						
Toluol (Toluene)	C ₇ H ₈	A	A	A	A	A	A	A	A		A	A	A	A	D	D	B	A	C	A	B	A		B	A			B
Tomato Juice	-	A	C	B	C	A	A	A	A			B	A		A	A	A	A	B	A	A	A						A
Transformer Oil	-	A	B	A	B	A	A	A	A			A	A		A		A	A	A	A		A		A				
Tributyl Phosphate	C ₁₂ H ₂₇ O ₄ P	A	A	A	A	A	A	A	A			B	A	A	D	B	D		A			A		A				
Trichlorethylene	C ₂ HCl ₃	B	A	B	C	B	A	A	A		B	B	B		D	D	B	A	C	A	B	A			A	A	A	
Trichloroacetic Acid	C ₂ HCl ₃ O ₂	D	B		D	D	C	B	B	A	D	B	D		C	B	C	A	D	A	B	A		A			A	
Triethanolamine	C ₆ H ₁₅ NO ₃	B		C	C	B	A	A	A			C	A		C	A	D		A	A		A		A				
Triethylamine	C ₆ H ₁₅ NO ₃		B	A		B		B		A		A			B	A	C	A	D		B	A					A	
Trisodium Phosphate	Na ₃ O ₄ P	D		A	B	A	A	A	A			C	B		A	A	B	A	A	A	A	A			D			
Tung Oil	-	B	B	B	B	A	A	A	A			B	A		A	D	A		A	A		A						
Turpentine	C ₁₀ H ₁₆	A	C	B	B	B	A	A	A		B	B	A		B	D	A	A	A	A	A	A		A			A	
Urea	CH ₄ N ₂ O	B	B	C	C	B	A	A	B	B		A	C	B	C	B	C	A	A	A	A	A		A		A		
Uric Acid	C ₅ H ₄ N ₄ O ₃	C				A	B	A		B		A	B	B				A	B			A						
Varnish	-	A	B	C	C	A	A	A	A			A	A		C	D	B	A	A	A		A						A
Vegetable Oils	-	A	B	A	B	A	A	A	A			B	A		A	C	A		A	A		A	A					
Vinegar	C ₂ H ₄ O ₂	D	C	D	D	A	A	A	A		A	C	A		C	A	C	A	B	A	B	A	A			A	A	
Vinyl Acetate	C ₄ H ₆ O ₂	B	B	A	B	B	A	B	B			C	B		D	B	C	A	C	A	B	A						
Water (distilled)	H ₂ O	A	B	C	D	A	A	A	A		A	A	A		A	A	B	A	B	A	A	A	A	A	B	A	A	
Water (fresh)	H ₂ O	A	B	C	C	A	A	A	A	A	A	A	A		A	A	B	A	A	A	A	A	A		B	A	A	
Water (acid mine)	-	D	D	D	D	B	A	A	B	B		A	C	B	B	A	A	D	A	A		A	A				A	
Waxes	-	A	A	A	A	A		A	A						A	C	A		A	A		A						
Whiskey & Wines	-	C	B	D	D	A	A	A	A		A	B	A		A	A	A	A	A	A	A	A					A	
Xylene, Xylol (dry)	C ₂₄ H ₃₀	A	A	B	B	A	A	A	A		A	A	B		D	D	B	A	A	A	A	A		B			A	
Zinc Bromide	Br ₂ Zn	D	B		D	B		B	B				D		B	B	B	A	A			A						
Zinc Hydrosulfite	ZnS ₂ O ₄	D	C	A	B	A		A	B	B			D	A		A	A	A		C			A					
Zinc Sulfate	ZnSO ₄	D	C	C	D	B	A	A	B	B		A	C	B		A	A	A	A	C	A	A	A		A		A	
Zinc	Zn	C				A				A				A		A						A						