



MATERIAL COMPATIBILITY

3.40 | Guide Only

Ratings-chemical effect

- A - No effect - Excellent
- B - Minor effect - Good
- C - Moderate effect - Fair
- D - Severe effect - Not recommended

Explanation of footnotes

1. Satisfactory to 72°F
2. Satisfactory to 120°F
3. Satisfactory for O-rings

	CPVC	Epoxy	Polypropylene	Polyethylene	PVC	Cyclac® (ABS)	Phenolic	Nylon	Noryl®	Delrin® (Acetal)	Ryton® to 200°F	Kynar® (PVDF)	Teflon®	Stainless steel (316)	Stainless steel (304)	Stainless steel (440)	Titanium	Carpenter 20	Cast bronze	Cast iron	Aluminum	Hastelloy C	Carbon,ceramic	Caramagnet A	Viton®	Buna N	Neoprene®	Nitrile	Natural rubber	Hypalon®	EPDM	Kel-F®	Tygon	Silicone	Ceramic	Carbon/graphite				
Actadehyde	D	A	A	C	D	D	A	A	A ¹	A	D	A	A	A	-	A	-	A	C	B	A	A	-	D	D	C	D	C	C	A	A	D	A	A	A	A	A			
Acetamide	-	A	A ¹	A	D	-	D	A	B ¹	A	C	A	A	A	B	-	-	-	D	D	-	-	-	-	B	A	B	A	D	B	A	A	D	B	A	A	A			
Acetate Solvent	C	A	D	A	D	-	D	A	D	A	A	A	A	A	A	A	A	A	C	D	A	A	A	-	D	C	D	C	C	C	C	A	A	D	C	A	A	A		
Acetic Acid, Glacial	C	B ¹	A ¹	A ²	D	D	D	D	A	C	A	A ¹	A	A	C	D	A	A	C	D	A	A	A	-	D	C	D	C	B	C	B	A ²	D	B	A	A	A	A		
Acetic acid 20%	A	A	A	A	D	C	C	B	A	B	A	A	A	A	B	D	A	A	C	D	A	A	A	-	B	B	A	C	B	B	A	A	D	B	A	A	A	A		
Acetic Acid 80%	C	C	A	A ²	D	D	D	D	A	C	A	C	A	A	C	D	A	A	C	D	A	A	A	-	B	C ³	C	C	B	C	A	A	D	B	A	A	A	A		
Acetic Acid	C	C	B	A ²	D	D	D	D	A	C	A	C	A	A	C	D	A	A	C	D	A	A	A	-	B	C ³	C	C	B	C	A	A	D	C	A	A	A	A		
Acetic Anhydride	D	A	B ¹	D	D	D	D	A	A ¹	D	D	A	B ¹	A	A	A	D	A	B	C	-	A ¹	A	A	-	D	D	C	D	B	A	B	A	D	C	A	A	A		
Acetone	D	D	A	B ¹	D	D	A	A	D	C	A	D	A	A	A	B	A	A	A	A	A	A	A	A	D	D	C	D	C	B	A	A	D	B	A	A	A	A		
Acetyl Chloride (dry)	C	A	-	D	C	D	-	D	D	D	A	A ²	A	A	A	-	-	B	-	-	A	A	-	A	D	D	D	D	D	D	A	D	C	-	-	-	-	-		
Acetylene	C	A	A ¹	A	A ¹	-	A	A	-	-	A	A	A	A	A	-	-	A	C	A	A	-	A	A	A	B	B	B	B	C	A	-	-	D	A	B	A	A		
Acrylonitrile	A	A	A	A	-	D	D	A	-	-	-	A ¹	A	A ¹	A ¹	-	-	A ¹	-	A ¹	B ¹	B	A	A	D	D	C	D	D	C	D	-	-	D	A	B	A	A		
Alcohol: Amyl	A ²	D	B ¹	B ²	A ²	-	A	A ¹	C	A	A	A	A	A	A	-	B	A	A	-	B	A	A	-	B	B	A	B	B	A	A	A	B	D	A	A	A	A		
Alcohol: Benzyl	A	A ¹	A	D	D	D	A	D	D	A	A	A	A	A ¹	A ¹	-	A	A	A	A	B ²	A	A	-	A	D	C	D	D	B	B	A	B	-	A	-	-	-		
Alcohol: Butyl	A ²	A	A	A	A ²	-	C	A	A	A	A	-	A	A	A	-	A	A	A	D	B	A	A	-	A	A	C	D	A	A	B	A	B	-	B	B	A	-	-	
Alcohol: Diacetone	-	A	B ²	B ¹	B ¹	-	A	A	A	A	-	A ¹	A	A	A	-	A	A	A	A	A ¹	A	A	-	D	D	D	D	D	D	A	-	-	D	A	A	A	A		
Alcohol: Ethyl	A ¹	A ²	A	B	C	B	A	A	A	B	-	-	A	A	A	A	A	A	A	A	B	A	A	A	A	C	A	C	A	A	A	-	C	B	A	-	-	-		
Alcohol: Hexyl	-	A	-	A	A ²	-	A	A	A	A	-	-	A	A	A	-	A	A	A	A	A	A	A	-	C	A	A	A	A	B	C	-	-	-	-	-	-	-		
Alcohol: Isobutyl	-	A	A ¹	A ²	A ¹	B	C	A ¹	A	A	-	-	A ²	A	A	-	B	A	A	C	B	A	A	-	A	B	A	B	A	A	A	-	-	-	-	-	-	-		
Alcohol: Isopropyl	A ²	A	A ²	A ²	A ¹	-	A	B ¹	A ¹	A	-	-	A ²	A	A	-	A	A	A	C	B	B	A	-	A	B	B	B	A	A	A	-	-	-	-	-	-	-		
Alcohol: Methyl	A ¹	B ¹	A ²	A ¹	B ¹	-	A	A	A ¹	C	A	A	A	A	A	B ¹	B	A	A	A	A ¹	A	A	A ¹	B ²	A	A	A	A	A	A	A	A	A	A	A	A	A	A	
Alcohol: Octyl	-	A	-	A	C	B	A	A	A	A	-	-	-	A	A	-	A	A	A	A	C	A	-	-	B	B	B	B	B	B	A	-	-	-	-	-	-	-	-	
Alcohol: Propyl	A ²	A ¹	A	A ²	A ²	-	C	B	A ²	A	A	A ²	A	A	A	A	A	A	A	C	A	A	A	-	A	A	A	B ²	A	A	A	-	-	-	-	-	-	-	-	
Aluminum Chloride 20%	A ¹	A ¹	A	B ²	A ¹	B	D	D	A	C	A	A	A	C ¹	D	D	B	C ¹	D	D	D	A	A	-	A	A	A	A	B	A	A	B	A	B	A	A	A	A	A	
Aluminum Chloride	A ²	A ¹	A	B ²	A ¹	-	-	D	A	-	A	A	A	C ¹	A ¹	D	B	C ¹	D	D	A ¹	A	A	-	A	A	A	A	A	B	A	A	B	B	A	A	A	A	A	
Aluminum Fluoride	A ²	B ¹	A	A ²	A ²	-	-	A ¹	A ¹	C	A	A	A	C ¹	B ¹	D	A	C ¹	-	-	B ¹	B	A	-	A	A	A	A	B	A	A	-	-	-	-	-	-	-	-	
Aluminum Hydroxide	A	B ¹	A	A ²	A ²	-	D	A ¹	A	B	-	A	A	D ¹	A ¹	A ¹	B ¹	A ¹	C	A	B ¹	B	A	A	A	A	A	A ²	D	A ²	A	A ¹	-	-	-	-	-	-		
Aluminum Potassium Sulfate 10%	A ²	A ¹	A	A ²	A ²	-	-	D	A ²	C	-	B ¹	A	B ²	C	B ¹	A	A	-	D	C	C	A	-	A	A	A	A	A	A	A	A	B	A	A	A	A	A		
Aluminum Potassium Sulfate 100%	A ²	A ¹	A	A ²	A ²	-	-	D	A ²	C	-	-	A	B ²	C	D	A	B	-	D	C	C	A	-	A	A	A	A	A	A	A	A	B	A	A	A	A	A	A	
Aluminum Sulfate	A ²	A ¹	A	A ²	A ²	-	A	A ²	C	C	A	A	A	B ¹	B	D	A	B	C	D	B ¹	B	A	-	A	A	A	A	A	A	A	A	B	A	A	A	A	A	A	
Amines	D	A ¹	-	C ¹	D	-	D	D	D	D	B	-	A ²	A	A	A	B	B	D	D	B	C	A	-	D	D	B	D	B	D	B	A	-	-	B	A	A	A		
Ammonia 10%	A	A ¹	A ²	C ¹	B ¹	-	A	A	A ¹	D	A ¹	A	A	A ¹	A ¹	A ¹	C	A ¹	D	A	A ¹	B	A	-	D	A	A	D	D	A	A	B	-	-	-	-	-	-		
Ammonia, anhydrous	A	A	A	B ²	A ²	-	A	A ¹	B ¹	D	A ¹	A	A	A ¹	A	A	C	A	D	A	A ¹	B	C	-	D	B	C	B	D	D	A	A	D	A	A	A	A	A		
Ammonia, liquid	A	A ¹	A ²	C ¹	A ²	-	A	B ¹	-	D	A ¹	A	A	A	B ²	B ²	C	B ²	D	A	C	A	A	-	D	C	A	C	D	D	A	A	B	-	-	-	-	-		
Ammonia, Nitrate	B	A	A	-	B ¹	-	A	D	A	C	A	A	A	A	A	-	A	A	D	A	C	-	A	-	D	C	C	C	-	D	A	-	-	-	-	-	-	-		
Ammonium Bifluoride	A	A ¹	A	A ²	A ²	-	D	-	A	D	-	A	A	-	C	-	-	B	D	D	B	B	-	-	A	A	A	A ²	-	-	A ²	-	-	-	-	-	-	-	-	
Ammonium Carbonate	A	A ¹	A	B ²	A ²	-	A	A	A ²	D	A	A	A	B	B	B	A	B	D	A	B	B	A	-	-	D	A	B	B	A	-	-	-	-	-	-	-	-	-	
Ammonium Casenite	-	A	-	-	-	-	D	-	A	D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Ammonium Chloride	A ²	A ¹	A ²	A ²	A ²	-	A	C	A	B	A	A	A	D ¹	C	C	B	B	D	D	C	A	A	-	A	B	A	B	A	A	A	B	-	-	-	-	-	-	-	
Ammonium Hydroxide	A	A ¹	A	A ¹	A	B	A	A	A	A	C ¹	A	A	A	A ¹	A ¹	B	A	B	A	A	B ²	B	A	-	B	D	A	D	A	A	A	B	A	A	A	A	A	A	
Ammonium Nitrate	A ²	A ¹	A	A	A ²	-	D	B	A	C	A	A	A	A	A ¹	A ¹	A	A	D	A	B ¹	B	A	-	A	A	B	A	C	A	A	B	-	-	-	-	-	-	-	
Ammonium Oxalate	-	A	-	-	A	-	D	-	-	B	-	-	-	A	A	A	-	A	D	D	-	A	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Ammonium Persulfate	A	A ¹	A	A ²	A ²	-	C	C ¹	A ¹	D	-	A ¹	A ¹	B	A	A	A	B	D	C	D	B	A	-	A	D	A	D	A	A	A	A	A	-	-	-	-	-	-	-
Ammonium Phosphate, Dibasic	A	A ¹	A	A ²	A ²	-	A	C ¹	A	B	-	-	A ²	B	B	B	A	A	A ¹	C	C	B ¹	B	A	-	A	A	A	A	A	A	A	-	-	-	-	-	-	-	
Ammonium Phosphate, Monobasic	A	A	A	A	A	-	A	B	A	B	-	-	A	C ¹	B	B	A	C ¹	D	D	B	B	A	-	A	A	A	A	A	A	A	-	-	-	-	-	-	-	-	
Ammonium Phosphate, Tribasic	A	A	A	C	A	-	A	B	A	B	-	-	A	B	B	B	A	-	C	A	B	B	A	-	A	A	A	A	A	A	A	-	-	-	-	-	-	-	-	
Ammonium Sulfate	A	A ¹	A	A	A ²	-	A	A ¹	A	-	A	A	A	B	B	B	A	B	D	C	A ¹	B	A	-	A	A	A	A	A	A	A	A	-	-	-	-	-	-	-	
Ammonium Thiosulfate	-	A	-	A	-	-	A	-	-	B	-	-	-	A	-	-	-	-	D	D	-	-	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Amyl Acetate	C ¹	A	D	B ¹	C ¹	C ¹	-	D	C ²	D	A	A	A ²	A	A	A ¹	B	A	A</																					