

RATINGS

A	No Effect - Excellent - at ambient temperature
B	Minor Effect - Good - at ambient temperature
C	Moderate Effect - Fair - additional research required
D	Severe Effect - NOT RECOMMENDED
—	No Data

CHEMICAL ATTACK

SERVICE TEMPERATURE LIMITATIONS

Crosslink Polyethylene: -40°F to +150°F Linear
Polyethylene: -20°F to +120°F

Note: Constant service temperatures above 100°F greatly reduce useful tank life, please consult factory.

Chemical Name	Polyethylene	Polypropylene	P.V.C.	316 Stainless Steel	Titanium	Hastelloy C-276	Viton	E.P.D.M.	Chemical Name	Polyethylene	Polypropylene	P.V.C.	316 Stainless Steel	Titanium	Hastelloy C-276	Viton	E.P.D.M.
Acetic Acid* 1-10%	A	A	B	A	B	A	C	A	Cola Concentrates*	A	-	-	A	-	-	-	-
Acetic Acid* 10-60%	A	A	C	A	B	A	C	A	Copper Chloride sat'd	A	A	A	D	A	-	A	A
Acetic Acid* 80-100%	A	A	C	A	B	A	C	B	Copper Cyanide sat'd	A	A	A	A	-	A	A	A
Aluminum Chloride-dilute	A	A	A	C	A	A	A	A	Copper Flouride 2%	A	-	A	D	-	-	-	-
Aluminum Chloride-conc.	A	-	A	C	A	A	A	A	Copper Nitrate sat'd	A	A	A	A	A	A	A	-
Aluminum Flouride-conc.	A	A	A	C	A	B	-	A	Copper Sulfate Dilute 5%	A	A	A	A	A	-	A	A
Aluminum Sulfate-conc	A	A	A	A*	A	A	A	A	Copper Sulfate sat'd	A	-	-	A	A	-	-	A
Alums (all types) conc***	A	A	A	A	A	A	A	A	Cottonseed Oil*	A	-	A	A	-	-	A	B
Ammonia 100% Dry Gas	A	A	A	A	A	-	-	B	Cuprous Chloride sat'd	A	-	-	-	-	-	A	A
Ammonium Carbonate	A	A	A	A	A	B	B	C	Cychohexanol*	A	-	-	A	-	-	A	D
Ammonium Chloride-sat'd	A	A	A	A	-	A	B	A	Detergents Synthetic*	A	A	A	A	-	-	A	A
Ammonium Flouride 20%	A	-	A	-	-	-	-	-	Developers, Photographic	A	-	-	A	A	-	A	-
Ammonium Hydroxide 0.888 sq	A	A	A	A	A	A	B	A	Dextrin sat'd	A	-	-	-	-	-	-	-
Ammonium Metaphosphate sat'd	A	A	A	-	-	-	-	-	Dextros sat'd	A	A	A	-	-	-	-	-
Ammonium Nitrate sat'd	A	A	A	A	A	A	B	A	Dibutylphthalate	A	-	-	-	-	-	B	C
Ammonium Persulfate sat'd	A	A	A	A	-	A	A	B	Disodium Phosphate	A	A	D	D	D	A	A	-
Ammonium Sulfate sat'd	A	A	A	A	A	B	-	A	Ethylene Glycol*	A	D	A	A	-	-	A	A
Ammonium Sulfi de sat'd	A	-	-	A	A	B	D	A	Ferric Chloride sat'd	A	A	A	D	D	-	A	A
Ammonium Thiocyanate sat'd	A	-	-	-	-	-	-	-	Ferric Nitrate sat'd	A	A	A	A	-	-	A	A
Amyl Alcohol* 100%	A	A	A	A	-	A	B	A	Ferric Sulfate	A	A	A	A	A	-	A	A
Aniline 100%	A	B	A	A	C	B	D	A	Ferrous Chloride sat'd	A	A	A	D	A	-	A	A
Antimony Chloride	A	-	-	-	-	-	-	A	Ferrous Sulphate	A	A	A	A	A	B	A	A
Barium Carbonate sat'd	A	A	A	A	A	-	-	A	Flouboric Acid	A	-	A	B	D	A	A	D
Barium Chloride	A	A	A	A	A	A	B	-	Flousilicic Acid 32%	A	-	A	C	-	B	A	A
Barium Hydroxide	A	A	A	A	B	B	A	A	Flousilicic Acid conc.	A	-	A	D	-	B	A	A
Barium Sulfate sat'd	A	A	A	A	-	-	A	A	Formaldehyde* 40%	A	A	A	A	A	A	A	A
Barium Sulfi de sat'd	A	A	A	A	-	-	A	A	Formic Acid* 0-20%	A	A	D	A	-	A	B	A
Benzene Sulfonic Acid*	A	D	-	-	-	-	-	A	Formic Acid* 20-50%	A	A	D	A	C	A	B	A
Borax Cold sat'd	A	A	A	A	A	A	A	A	Formic Acid* 100%	A	A	D	A	-	A	B	A
Boric Acid Dilute	A	A	A	A	A	A	A	A	Fructose sat'd	A	A	A	A	-	-	-	-
Boric Acid Conc	A	A	A	A	-	A	A	A	Fruit pulp	A	A	A	A	-	-	A	-
Bromic Acid 10%	A	D	-	-	-	-	-	-	Gallic Acid sat'd	A	-	-	-	-	-	-	A
Calcium Bisulfi de	A	A	A	B	A	A	A	-	Glucose	A	A	A	A	-	-	A	A
Calcium Carbonate sat'd	A	A	A	A	A	A	A	A	Glycerine*	A	A	A	A	A	A	A	A
Calcium Chlorate sat'd	A	A	A	-	A	-	-	A	Glycol*	A	-	A	-	-	-	-	A
Calcium Chloride sat'd	A	A	A	A	A	A	A	A	Glycolic Acid* 30%	A	A	A	-	-	A	A	-
Calcium Hydroxide	A	A	A	A	A	A	A	A	Grape Sugar sat'd ag	A	A	A	A	-	-	-	-
Calcium Hypochlorite Bleach	A	A	A	B	A	A	A	A	Hydrobromic Acid 50%	A	B	A	D	A	A	A	-
Calcium Nitrate 50%	A	-	A	-	-	-	-	A	Hydrocyanic Acid sat'd	A	A	A	-	C	A	A	-
Calcium Sulfate	A	A	A	A	-	B	A	A	Hydrochloric Acid 10%	A	A	A	D	C	A	A	A
Carbon Dioxide 100% Dry	A	A	A	A	A	-	B	A	Hydrochloric Acid 30%	A	A	A	D	C	A	A	A
Carbon Dioxide 100% Wet	A	A	A	A	A	-	B	A	Hydrochloric Acid 35%	A	A	A	D	C	A	A	D
Carbon Dioxide Cold sat'd	A	-	A	A	A	-	B	A	Hydrochloric Acid conc.	A	A	A	D	C	A	A	D
Carbonic Acid	A	-	A	B	-	A	A	A	Hydroflouric Acid 40%	A	A	D	D	D	B	A	D
Castor Oil* Conc	A	-	A	-	-	A	A	A	Hydroflouric Acid 60%	A	D	D	D	D	B	A	D
Chrome Alum sat'd	A	-	B	-	-	-	A	B	Hydroflouric Acid 75%	A	D	D	D	D	B	A	D
Chromic Acid 20%	A	A	B	A	A	A	A	D	Hydroflousilicic Acid	A	B	B	-	A	-	-	A
Cider*	A	-	A	A	-	-	A	-	Hydrogen Bromide 10%	A	-	D	-	-	-	-	-
Citric Acid* sat'd	A	B	A	A	A	A	A	A	Hydrogen Peroxide 30%	A	A	A	A	B	A	A	D
Coconut Oil Alcohols*	A	-	-	A	-	-	A	D	Hydrogen Peroxide 90%	A	A	A	D	B	A	A	D

Chemical Name	Polyethylene	Polypropylene	P.V.C.	316 Stainless Steel	Titanium	Hastelloy C-276	Viton	E.P.D.M.
Hydrogen Phosphide 100%	A	-	-	-	-	A	-	-
Hydroquinone	A	-	-	-	-	-	-	C
Hydrogen Sulfide	A	A	A	A	A	-	D	B
Inks*	A	-	-	A	-	-	A	-
Iodine (alc. Sol) conc.	A	D	D	D	A	B	A	B
Lactic Acid* 10%	A	A	A	-	A	-	A	A
Lactic Acid* 90%	A	A	A	A	A	-	A	B
Latex*	A	A	A	A	-	-	A	A
Lead Acetate sat'd	A	A	A	B	A	-	D	A
Lube Oil	A	A	A	A	-	-	A	C
Magnesium Carbonate sat'd	A	A	A	A	-	B	-	-
Magnesium Chloride sat'd	A	A	A	A	A	A	A	A
Magnesium Hydroxide sat'd	A	A	A	A	A	-	A	A
Magnesium Nitrate sat'd	A	A	A	A	-	-	-	A
Magnesium Sulphate sat'd	A	A	A	A	A	B	A	A
Mercuric Chloride sat'd	A	-	A	D	A	B	A	A
Mercurous Nitrate sat'd	A	-	A	-	-	-	-	A
Milk	A	A	A	A	A	-	A	A
Mineral Oils	A	-	A	A	-	-	-	D
Molasses	A	A	A	A	-	-	A	A
Nickel Chloride sat'd	A	A	A	A	A	-	A	A
Nickel Nitrate conc.	A	A	A	A	-	-	-	-
Nickel Sulfate sat'd	A	A	A	A	-	-	A	A
Nitric Acid* 0-30%	A	A	A	A	A	A	A	A
Oils & Fats	A	A	-	A	-	-	A	B
Oleic Acid conc.	A	A	A	A	-	-	B	D
Orange Extract*	A	-	-	A	-	-	-	-
Oxalic Acid* dilute	A	A	A	-	C	B	A	-
Oxalic Acid* sat'd	A	A	A	A	C	-	A	A
Perchloric Acid 10%	A	-	-	-	-	-	-	A
Phosphoric Acid up to 30%	A	A	A	A	A	A	A	A
Phosphoric Acid over 30%	A	A	A	B	B	A	A	A
Phosphoric Acid over 90%	A	A	A	B	B	A	A	A
Phosphoric (Yellow) 100%	A	-	-	-	-	-	-	-
Phosphorus Pentoxide 100%	A	-	-	-	-	-	-	-
Photographic Solutions	A	A	A	A	A	A	-	-
Pickling Baths								
Sulfuric Acid*	A	-	-	B	-	-	A	D
Hydrochloric Acid*	A	-	A	D	A	-	A	D
Sulfuric-Nitric*	A	-	-	B	-	-	A	D
Plating Solutions								
Brass*	A	A	A	A	-	A	-	B
Cadmium*	A	A	A	-	-	A	-	B
Copper*	A	A	A	-	-	-	A	B
Gold*	A	A	A	A	-	-	A	B
Indium*	A	A	A	A	-	-	A	B
Lead*	A	A	A	-	-	-	A	B
Nickel*	A	A	A	-	-	-	A	B
Rhodium*	A	-	-	-	-	-	-	B
Silver*	A	A	A	A	-	-	A	B
Tin*	A	A	A	A	-	-	A	B
Zinc*	A	A	A	A	A	-	A	B
Potassium Bicarbonate sat'd	A	-	A	B	-	-	A	A
Potassium Borate 1%	A	-	-	-	-	-	-	-
Potassium Bromate 10%	A	-	A	A	-	-	-	-
Potassium Bromide sat'd	A	A	A	A	A	A	-	A
Potassium Carbonate	A	A	A	A	-	B	A	A
Potassium Chlorate sat'd	A	A	A	A	-	B	A	A
Potassium Chloride sat'd	A	A	A	A	A	B	A	A
Potassium Chromate 40%	A	A	A	B	A	A	A	-
Potassium Dichromate 40%	A	A	A	A	A	B	A	A
Potassium Hydroxide 20%	A	A	A	A	C	B	D	A
Chemical Name	Polyethylene	Polypropylene	P.V.C.	316 Stainless Steel	Titanium	Hastelloy C-276	Viton	E.P.D.M.
Potassium Hydroxide conc.	A	A	A	A	C	B	D	A
Potassium Nitrate sat'd	A	-	A	A	-	B	-	A
Potassium Perborate sat'd	A	-	-	-	-	-	A	-
Potassium Perchlorate 10%	A	-	-	-	-	-	-	-
Potassium Permanganate	A	A	D	A	A	A	A	A
Potassium Sulfate conc.	A	A	A	B	A	B	A	A
Potassium Sulfide conc.	A	A	-	-	A	-	A	B
Potassium Sulfite conc.	A	A	A	-	A	-	A	D
Potassium Persulfate sat'd	A	-	A	-	-	-	-	-
Propylene Glycol*	A	-	-	A	-	-	A	A
Rayon Coagulations Bath*	A	-	-	-	-	-	-	-
Sea Water	A	A	A	A	A	-	A	A
Selenic Acid	A	-	-	-	-	-	-	-
Shortening*	A	A	-	A	-	-	-	-
Silicic Acid	A	-	-	-	-	-	-	-
Silver Nitrate Sol.	A	A	A	A	-	-	A	A
Soap Solution* any conc	A	A	D	A	-	-	A	A
Sodium Acetate sat'd	A	A	A	A	A	-	A	A
Sodium Benzoate 35%	A	-	-	-	-	-	-	-
Sodium Bicarbonate sat'd	A	A	A	A	-	B	A	A
Sodium Bisulfate sat'd	A	A	A	A	A	A	A	A
Sodium Bisulfite sat'd	A	A	A	A	A	B	A	A
Sodium Borate	A	-	-	-	-	-	A	A
Sodium Bromide Dilute Sol.	A	-	-	-	-	-	A	-
Sodium Carbonate conc.	A	A	A	A	A	-	A	-
Sodium Carbonate	A	A	A	A	A	-	A	A
Sodium Chlorate sat'd	A	A	A	A	A	A	A	-
Sodium Chloride sat'd	A	A	A	A	A	A	A	-
Sodium Dichromate sat'd	A	-	-	-	-	-	A	-
Sodium Hydroxide conc.	A	A	A	A	A	B	B	A
Sodium Hypochlorite to 17%*	A	A	A	D	A	B	A	B
Sodium Nitrate	A	A	A	A	A	-	A	A
Sodium Sulfate	A	A	A	A	A	B	A	A
Sodium Sulfide 25%	A	A	A	A	A	-	A	A
Sodium Sulfide sat's sol	A	A	A	A	A	-	A	A
Sodium Sulfite sat'd	A	A	A	A	A	-	A	A
Stannic Chloride sat'd	A	-	A	A	A	-	A	A
Stannous Chloride sat'd sol	A	-	A	A	A	-	A	A
Starch Solution* sat'd	A	-	A	-	-	-	A	A
Stearic Acid* 100%	A	D	-	-	A	-	A	C
Sulfuric Acid 0-50%	A	A	A	B	A	A	A	C
Sulfuric Acid 70%	A	A	A	B	D	B	A	D
Sulfuric Acid 80%	A	D	D	-	-	A	A	D
Sulfurous Acid	A	A	A	B	A	B	A	C
Tallow	A	-	-	A	-	-	A	A
Tannic Acid* 10%	A	A	A	A	A	-	A	A
Tanning Extracts* Comm	A	-	A	A	-	A	-	-
Tartaric Acid sat'd	A	A	A	A	A	B	A	A
Transformer Oil	A	A	A	A	-	-	A	D
Trisodium Phosphate sat'd	A	-	-	-	-	-	-	-
Urea* Up to 30%	A	-	A	A	-	-	A	-
Urine	A	A	A	A	-	-	A	-
Vinegar Comm.	A	A	A	A	-	-	A	A
Vanilla Extract*	A	-	-	A	-	-	-	-
Water-All Types	A	A	A	A	A	A	A	A
Wetting Agents*	A	-	-	A	-	-	-	-
Whiskey*	A	A	A	A	-	-	A	A
Wines	A	A	A	A	-	-	A	A
Yeast	A	A	-	A	-	-	-	-
Zinc Chloride sat'd	A	A	-	A	-	-	-	-
Zinc Sulfate sat'd	A	A	A	A	A	-	A	A

* Stress Cracking Agent

** No Free Sulfuric Acid

This information is based on our experience, research and support from other published chemical resistance charts, intended to be used only as a guide. Additional assistance should be requested if there is a doubt about compatibility, suitability, warranty, allowable transportability, or storage in Assmann products.

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