



PURITAN PRODUCTS

CHEMICAL BLENDING EXPERTISE

Quality • Consistency • Confidence

Product Shelf Life/Expiration Date Policy

Product	Package (material of construction)	Shelf-Life (months)
Acetic Acid – 99.7%	Glass and Polyethylene	24
Acetic Acid Dilutions	Glass and Polyethylene	24
Acetone \geq 99.5%	Polyethylene	36
Acetone \geq 99.5%	Metal	12
Acetone 85% / IPA 15% Blend	Polyethylene	18
Ammonium Chloride (solutions)	Polyethylene	36
Ammonium Fluoride (solutions)	Polyethylene	36
Ammonium Hydroxide 28 – 30%	Polyethylene	24
Ammonium Hydroxide 28 – 30%	Glass	36
Ammonium Hydroxide Dilutions	Polyethylene & Glass	36
Ammonium Sulfate	Polyethylene	24
Ammonium Sulfate Solutions	Polyethylene	24
Aqua Regia, Dilute	Polyethylene	12
Bismuth Trioxide	Polyethylene	36
Buffered Chemical Polish	Polyethylene	12
Buffered Citric 0.55M	Polyethylene	6
Buffered Oxide Etchants	Polyethylene	18
Buffer Standard Solution 0.5-2.5	Polyethylene	12
Buffer Standard Solution >2.5-8.0	Polyethylene	24
Buffer Standard Solution 9.0-10.0	Polyethylene	12
Buffer Standard Solution 12.45-13	Polyethylene	6
N-Butyl Acetate	Steel	36
N-Butyl Alcohol	Steel	36
Calcium Nitrate	Polypropylene (Bag)	36
Chloroform	Steel	24
Chloroform	Glass	36
Citric Acid, Monohydrate & Anhydrous	Polyethylene	24
Citric Acid Solution – 2.5%	Polyethylene	6
Citric Acid Solutions – 10% 500 mL	Polyethylene	6



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Citric Acid Solutions – 10% 4 L	Polyethylene	6
Citric Acid Solutions – 25%	Polyethylene	12
Citric Acid Solutions – 50%	Polyethylene	12
Citric Acid Solution – 5N	Polyethylene	12
Cobalt 6% Naphthenate, Natural	Steel	36
Cobalt 12% Octoate, Synthetic	Steel	36
Conductivity Standard Solution	Polyethylene	12
Cyclohexane	Steel	36
Cyclohexane/IPA Azeotrope	Amber Glass	12
1, 2-Dichloroethane	Steel	24
1, 2-Dichloroethane	Glass	36
Diethylaniline, N, N	Steel	36
Dimethylacetoacetamide	Polyethylene	12
Dimethylacetoacetamide	Steel	36
Dimethylaniline, N, N	Steel	36
Ethyl Acetate	Amber Glass	36
Ethyl Alcohol	Steel	36
Ethylene Glycol Nitrite-Benzoate	Polyethylene	24
Formaldehyde, 37%	Polyethylene	12
Formaldehyde Dilutions	Polyethylene	12
Formic Acid	Polyethylene	24
Glycerin	Polyethylene	24
Guanidine Hydrochloride Crystal	Polyethylene	24
Guanidine Hydrochloride Solution	Polyethylene	24
Guanidine Thiocyanate	Polyethylene	36
HEPES, Free Acid	Polyethylene	24
Heptane	Steel	12
Hydrochloric Acid 36.5-38%	Polyethylene	24
Hydrochloric Acid 36.5-38%	Glass	36



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Hydrochloric Acid Dilutions	Glass and Polyethylene	24
Hydrochloric Acid in Methanol	Polyethylene	12
Hydrofluoric Acid 48-52%	Polyethylene	36
Hydrofluoric Acid Dilutions	Polyethylene	36
Hydrogen Peroxide 29-32%	Polyethylene	24
Hydrogen Peroxide Dilutions	Polyethylene	36
Isopropyl Alcohol	Polyethylene and Steel	36
Isopropyl Alcohol/Nitric Blend	Glass	12
Lithium Hydroxide Solutions	Polyethylene	36
MES, Monohydrate	Polyethylene	24
Methanol	Steel and Polyethylene	36
Methanol IPA Blend	Polyethylene	12
Methanol Nitric Blend	PVC-Coated Glass & Polyethylene	12
Methyl Ethyl Ketone	Polyethylene and Steel	36
N-Methyl Pyrrolidone	Polyethylene	36
Mixed Acid Etchants	Polyethylene	12
Monoethanolamine	Polyethylene	24
MOPS, Free Acid	Polyethylene	24
Nitric Acid 68 – 70%	Teflon-Lined Drum	24
Nitric Acid 68 – 70%	PPQ Resin	12
Nitric Acid 68 – 70%	Glass	36
Nitric Acid, 90% Fuming	Glass	36
Nitric Acid, 98% Fuming	Glass	24
Nitric Acid, Red Fuming	Glass	24
Nitric Acid Dilutions, 1 – 10%	Polyethylene Drum or Carboy	36
Nitric Acid Dilutions, 11 – 40%	Polyethylene Drum or Carboy	12
Nitric Acid Dilutions, 1 – 40%	Polyethylene (PPQ Only)	36
Nitric Acid Dilutions, 41 – 67%	Polyethylene (PPQ Only)	12
Nitric Acid Dilutions, 9-11%	Customer Supplied Poly	12



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Peracetic Acid 0.25%	Polyethylene	12
Perchloric Acid 60 – 72%	Glass	36
Petroleum Ether	Steel	12
Phosphoric Acid 85 – 88%	Polyethylene and Glass	36
Phosphoric Acid in Brine	Polyethylene	36
Phosphoric Acid Dilutions	Glass and Polyethylene	24
Phosphoric-Nitric Mixture	Polyethylene	12
Potassium Bicarbonate Solutions	Polyethylene	36
Potassium Carbonate Solutions	Polyethylene	36
Potassium Chloride Solutions	Polyethylene	36
Potassium Hydroxide Solutions	Polyethylene	36
Potassium Iodide	Polyethylene	36
Potassium Permanganate	Polyethylene	36
n-Propyl Alcohol	Steel	36
Pure Strip	PPQ	6
Silox Etch	Polyethylene	18
Sodium Acetate, Trihydrate	Polyethylene	24
Sodium Acetate Solutions	Polyethylene	24
Sodium Bicarbonate Solutions	Polyethylene	36
Sodium Chloride Salt	Polyethylene	24
Sodium Chloride Solutions	Polyethylene	36
Sodium Citrate, Dihydrate	Polyethylene	24
Sodium Hydroxide, Pellets	Polyethylene	24
Sodium Hydroxide Solutions	Glass and Polyethylene	24
Sodium Iodide	Polyethylene	36
Sodium Phosphate, Dibasic, Heptahydrate	Polyethylene	24
Sodium Phosphate, Monobasic, Monohydrate	Polyethylene	24
Sodium Thiosulfate	Polyethylene	18



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Stainless Steel Oxide Removal Solution	PPQ	12
Succinic Acid Etch	Polyethylene	12
Sulfuric Acid (≤50%)	Polyethylene (bottle/drum)	36
Sulfuric Acid, 51% to 93%	Polyethylene (bottle/drum)	24
Sulfuric Acid (≥94%)	Polyethylene Bottle	10
Sulfuric Acid (≥94%)	Glass	36
Sulfuric Acid (≥94%)	Polyethylene Drum	6
Sulfuric Acid, Fuming (Oleum, 15% - 20%)	Glass	24
Sulfuric Peroxide Solution, Dilute	Polyethylene	12
Tetrahydrofuran	Steel	12
THF/Heptane	Steel	12
Titanium Dioxide Cleaner	Polyethylene	12
TMAH (Tetramethylammonium hydroxide)	Polyethylene	12
TRIS Hydrochloride	Polyethylene	24
TRIS (Tromethamine)	Polyethylene	24
Tromethamine	Polyethylene	24
Toluene	Steel	36
Triton CG-110 Surfactant	Lined Steel	24
Urea	Polyethylene	24
Xylene	Glass and Steel	36

Shelf life periods are valid for unopened containers only. The product must be stored under the Handling and Storage conditions noted in Section 7 of the product SDS. If a product has been opened, we recommend testing the product against critical parameters for fitness of use in your specific application.

The expiration date of a product is the shelf life period added to the manufacture date of the product and extended until the end of the month. Example: An aqueous solution of 10% sodium hydroxide was manufactured on 07/25/2016. The expiration date for an unopened container will be 07/31/2018.

Puritan Products materials are warranted to conform to the specifications appearing in the certificate of analysis associated with the product and its lot number until the expiration date is reached.