

High Purity VRB Electrolyte



CHEMISTRY

Elements	
Vanadium Molarity	1.58 - 1.62 mol/L
Vanadium Valence	3.48 - 3.5
Density	1.35 - 1.38 g/cc
Sulfuric Acid Molarity	4.1 - 4.3 mol/L
Silver (Ag)	<0.05 mg/L
Aluminum (Al)	<40 mg/L
Arsenic (As)	<0.25 mg/L
Bismuth (Bi)	<0.2 mg/L
Calcium (Ca)	<30 mg/L
Cobalt (Co)	<0.1 mg/L
Chromium (Cr)	<15 mg/L
Copper (Cu)	<0.5 mg/L
Iron (Fe)	<60 mg/L
Iridium (Ir)	<0.004 mg/L

CHEMISTRY (Continued)

Potassium (K)	<20 mg/L
Magnesium (Mg)	<20 mg/L
Manganese (Mn)	<5 mg/L
Molybdenum (Mo)	<20 mg/L
Sodium (Na)	<50 mg/L
Nickel (Ni)	<5 mg/L
Rhenium (Re)	<0.01 mg/L
Rhodium (Rh)	<0.01 mg/L
Ruthenium (Ru)	<0.01 mg/L
Antimony (Sb)	<0.5 mg/L
Silicon (Si)	<13 mg/L
Tin (Sn)	<0.5 mg/L
Zinc (Zn)	<3 mg/L

Packaging - Bulk

VRB Electrolyte is a high-purity product used in vanadium redox batteries (VRB) as an energy storing liquid. VRB Electrolyte is produced at our ISO 9001:2015 certified Hot Springs, Arkansas facility.

This specification is for US Vanadium's standard VRB Electrolyte. Other Electrolyte compositions can be made to meet specific customer needs upon request.

Specification No. MC21 Revision No. 5

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Director of Technology Approval

Chad Martin

Quality Manager Approval

Robert Elliott