

High Purity 1.8 Molar VRB Electrolyte



CHEMISTRY

Elements	
Vanadium Molarity	1.78 - 1.82 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)	<17 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)	<15 mg/L
Tin (Sn)	<0.5 mg/L
Zinc (Zn)	<3 mg/L

Packaging – 330 Gallon PE IBC Totes

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 1.8 Molar VRB Electrolyte. Other Electrolyte compositions can be made to meet specific customer needs upon request.

Specification No. MC25 Revision No. 1

Issue Date: 11/08/22 Revision Date: 04/17/24

Director of Technology Approval



Quality Manager Approval

