

WP-1 PRODUCT DATA SHEET

Purity Systems Inc. Silica Based Technologies for a Cleaner Environment and Advanced Hydrometallurgy/IX

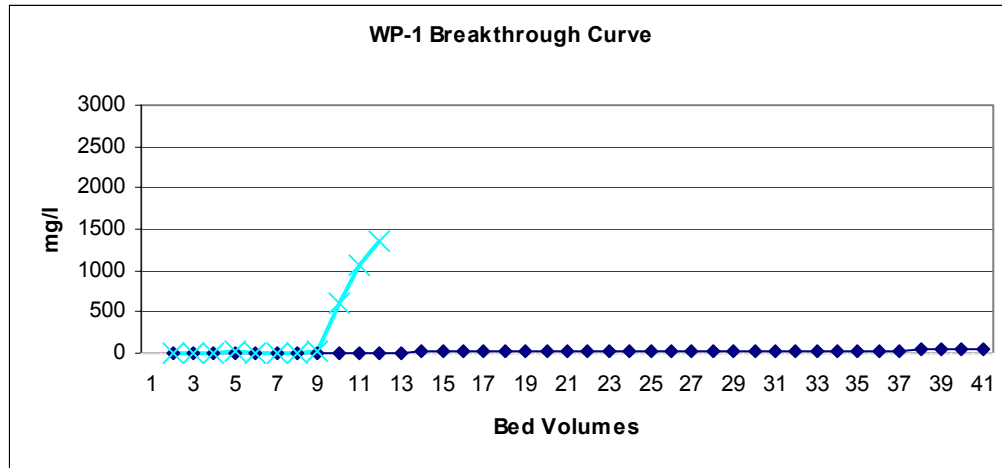
PSI has developed a complete line of metal ion recovery materials for applications in the mining, electroplating and environmental remediation industries. Below are the general characteristics and the range of properties of WP-1 followed by a summary of standard test results.

Physical and Chemical Characteristics of WP-1 Purity Systems Silica Polyamine Composite

Matrix.....	Modified Hydrophilic Polymers Grafted to Amorphous Silica Gel
Physical Form and Appearance.....	White to Cream Colored Irregular or Spherical Shaped Particles
Functional Groups.....	Amine
Form (as shipped).....	Free Base
Screen Size Mesh Range.....	> 90% 180-250micron
Moisture Content (as shipped).....	< 10 %
Reversible Swelling.....	0%
Specific Gravity (as shipped).....	0.56 – 0.65
Total Copper Exchange Capacity (flow at pH=3).....	>43g/kg
Maximum Operating Temperature (tested so far).....	110 °C (230°F)
pH Range (operating, depending on metal).....	3-11
Pressure Drop Across an 18” Deep x1” Wide Bed at 30 Bed Volumes/Hr.....	18 psi

Performance Specifications

1. Copper breakthrough using 3000 ppm copper solution at pH = 3 loaded and stripped at 0.1 CV/min in a 10 cc column. Flow capacity 51 g/Kg at 60% breakthrough. Mass balance =96%.



Supersedes Prior Information as of May 2004