

Description

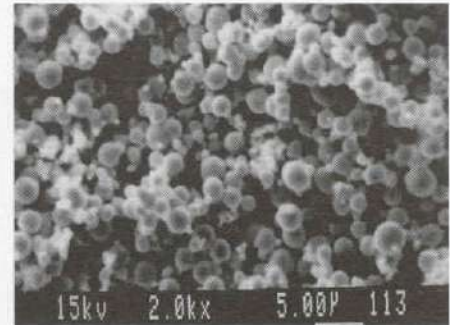
CuLox provides pure silver and silver coated copper powders and flakes. The silver powders are chemically precipitated, while the coated products use gas atomized powders for feed stock. Our coated products have a continuous and uniform coating of silver which can be varied from 5-20 wt%. The size of our coated products is controlled by the size of our copper feed stock.

General Application

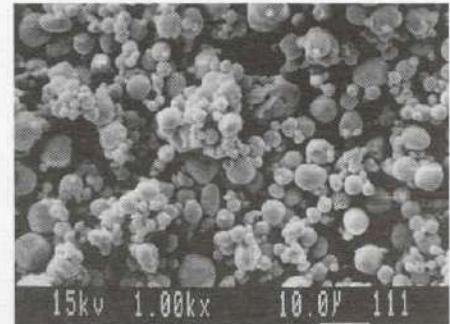
CuLox coated products are developed for use in the manufacture of fired electronic pastes, conductive inks, and conductive adhesive applications.

Pure Silver Spheres

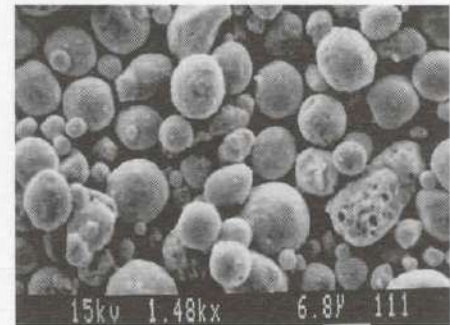
Properties	0010	0020	0030
Ag Minimum	99.8	99.8	99.9
Total Heavy Metals Max. (Cu, Ni, Fe, Pb)	0.01	0.02	0.02
Na + K Maximum	0.01	0.01	0.01
Med. Size (Microtrac/Horiba) microns	0.25-1.0	0.5-2.0	1.25-3.5
Surface Area (m ² /g)	1.0-3.0	0.25-1.5	0.25-0.75
Tap Density (gm/cc)	1.0-2.0	2.0-5.0	3.0-5.0
Apparent Density (gm/in ³)	10-20	20-50	20-50



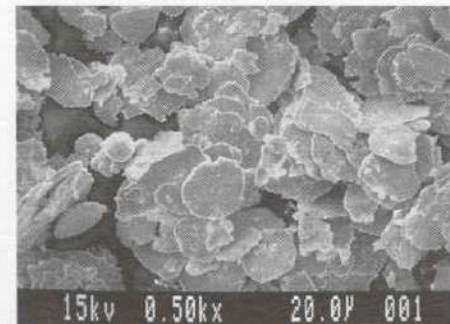
Typical SEM Photo of Ag (0030)
3 Micron Sphere



Typical SEM Photo of Cu Coated with Ag
Spheres (CuLox 6030), 3 Micron Sphere



Typical SEM Photo of Cu Coated with Ag
Spheres (CuLox 6080), 8 Micron Sphere



Typical SEM Photo of Cu Coated with Ag
Flakes (CuLox 6200), 20 Micron Flake

Silver Coated Copper Spheres and Flakes

Properties	Spheres		
	6030	6080	6200
Cu Minimum (Core Metal)	99.9 wt%	99.9 wt%	99.9 wt%
Ag Content	5-20 wt%	5-20 wt%	5-20 wt%
Med. Size (Microtrac/Horiba) microns	3.0-6.5	5.0-10.0	10.0-25.0
Surface Area (m ² /g)	0.3-1.5	0.20-1.5	.01-1.0
Tap Density (gm/cc)	2.0-4.0	3.0-4.0	3.0-4.5
Apparent Density (gm/in ³)	20-50	20-50	20-50

Properties	Flakes		
	6030	6080	6200
Cu Minimum (Core Metal)	99.9 wt%	99.9 wt%	99.9 wt%
Ag Content	5-20 wt%	5-20 wt%	5-20 wt%
Med. Size (Microtrac/Horiba) microns	3.5-7.0	7.0-12.0	15.0-25.0
Surface Area (m ² /g)	0.35-2.0	0.20-1.5	0.1-1.0
Tap Density (gm/cc)	2.0-4.0	3.0-4.0	3.0-4.5
Apparent Density (gm/in ³)	20-50	20-50	20-50

CuLox Technologies, Inc. believes the information contained herein to be complete and reliable. However, no guarantee or warranty of any kind, expressed or implied is made with respect to the information contained herein. CuLox assumes no responsibility for the results from the use of these products and processes. It is also not responsible for damages incurred from the use of the information in whole or in part. Statements or recommendations made herein are not to be construed as inducements to infringe any relevant patent in existence now or hereafter.