

# Fair-Rite P/N **2944770301**

## 44 Material Grade

## Nominal Chemical Composition

<u>Compound</u>	<u>CAS Number</u>	<u>wt %</u>	Wt of core (g)= <b>6.890</b>	Compound Weight (g) Breakdown of 44 Material
Fe2O3	1309-37-1	64	4.4096	
ZnO	1314-13-2	21	1.4469	
NiO	1313-99-1	11	0.7579	
CuO	1317-38-0	4	0.2756	

## Pb- Free Plated Round Cu Wire

<u>Element</u>	<u>CAS Number</u>	<u>wt%</u>	Wt of wire (g)= <b>0.420</b>	Element Weight (g) Breakdown of Pb- Free Plated Round Cu Wire
Cu	7440-50-8	94.4	0.39648	
Plating:				
Ni	7440-02-0	0.9	0.00378	
Sn	7440-31-5	4.7	0.01974	

## Type EP399 Epoxy

<u>Element</u>	<u>CAS Number</u>	<u>wt%</u>	Wt of Epoxy (g)= <b>0.090</b>	Element Weight (g) Breakdown of Type EP399 Epoxy
Epoxy Resin	025085-99-8	45.0	0.0405	
Cyanoguanidine	461-58-5	5.0	0.0045	
Silica	7631-86-9	5.0	0.0045	
Aluminum Hydroxide	21645-51-2	35.0	0.0315	
Carbon Black	1333-86-4	10.0	0.0090	

## Calculated Maximum Levels of RoHS Restricted Substances Present in 44 Material Grade

<u>Impurity Substance</u>	<u>RoHS Threshold (ppm)</u>	<u>ppm</u>	Wt of core (g)= <b>6.890</b>	RoHS Impurity Substance Weight (g) Breakdown of 44 Material
Hexavalent chromium (Cr+6)	1000	0.00	0	
Cadmium (Cd)	100	<b>6.09</b>	4.19601E-05	
Mercury (Hg)	1000	<b>0.09</b>	6.201E-07	
Lead (Pb)	1000	<b>10.90</b>	0.000075101	
Polybrominated biphenyl (PBB)	1000	0.00	0	
Polybrominated diphenyl (PBDE)	1000	0.00	0	
Bis(2-Ethylhexyl) phthalate (DEHP)	1000	0.00	0	
Benzyl butyl phthalate (BBP)	1000	0.00	0	
Dibutyl phthalate (DBP)	1000	0.00	0	
Diisobutyl phthalate (DIBP)	1000	0.00	0	

### Supporting notes:

- P/N 2944770301 consists of:
  - core 44 Material Grade
  - wire Pb- Free Plated Round Cu Wire
  - epoxy Type EP399 Epoxy
- Moisture Sensitivity Level (MSL)= 1
- Max Reflow Temp= 260 degC
- Max Time at Max Reflow Temp= 40 sec
- RoHS 6/6 Compliant Terminations/ Wire are backwards compatible with standard Soldering Processes
- RoHS Conversion Date= 1/1/2005
- RoHS Compliance Marking is Contained on Shipping Labels