



**Statement of Materials, Construction**

**Revision:** 1.0  
**Date:** 15-Feb-05

LEAD-FREE -- 18L-SOICW -- TABLE OF MATERIAL DECLARATION								
No.	Component Name	Material Name	Component Weight (grams)	Materials Analysis (Element / Compound)	CAS Number	Material Mass (Gram)	Material Weight % (of Total Pkg)	Material Weight % (of Component)
1	Leadframe	Copper Alloy	0.16561	Cu	7440-50-8	0.16127	31.71627	97.378
				Fe	7439-89-6	0.00378	0.74260	2.28
				Pb	7439-92-1	0.00004	0.00900	0.007
				P	7723-14-0	0.00003	0.00586	0.018
				Ag	7740-22-4	0.00033	0.06514	0.2
				Zn	7440-66-6	0.00019	0.03811	0.117
2	Die	Silicon Chip	0.00234	Si	7440-21-3	0.00233	0.45790	99.5
3	Die attach material	Conductive Epoxy	0.00046	Epoxy resin ( 5-25)	Proprietary	0.00007	0.01357	15
				Silver (70-85)	7440-22-4	0.00037	0.07192	79.5
				Aromatic Amine (1-10)	Proprietary	0.00003	0.00498	5.5
4	Wire	Gold	0.00080	Au	7440-57-5	0.00080	0.15732	99.99
5	Lead Finish	Tin	0.00561	Sn	7440-31-5	0.00561	1.10331	100
6	Encapsulation	Epoxy Resin	0.33365	Fused Silica	60676-86-0	0.28260	55.57881	84.7
				Epoxy resin	29690-82-2	0.02169	4.26520	6.5
				Phenol Resin	9003-35-4	0.01335	2.62474	4
				Brominated Epoxy Resin	40039-93-8	0.00834	1.64046	2.5
				Carbon Black	1333-86-4	0.00100	0.19686	0.3
				Antimony trioxide	1309-64-4	0.00667	1.31237	2
Total Package weight			0.50847					

**Note:** Composition derived from MSDS and material C of C from Vendors;  
 Component Weight based on assembly of generic parts.

**Conclusion:**

The analysis table above shows that this package meets the following RoHS requirements for EACH PACKAGE COMPONENT (mold compound, lead frame, etc.)

	Maximum Allowable Limit (ppm)	Maximum Allowable Limit (wt %)
Lead*	1000 ppm	0.10%
Mercury	1000 ppm	0.10%
Cadmium	100 ppm	0.01%
Hexavalent Chromium	1000 ppm	0.10%
Polybrominated Biphenyls (PBB)	1000 ppm	0.10%
Polybrominated Biphenylethers (PBDE)	1000 ppm	0.10%

\* Lead is allowed up to 4% as an alloying agent in copper-based alloys