

# Fairchild Semiconductor Product Package Material Disclosure

Package Type	TSSOP-48					
Weight of Package (grams)	Maximum	1.97E-01				
	Minimum	1.86E-01				
Component	Material	Weight in grams	Substance in material	Wt% in finished product min	Wt% in finished product max	CAS #
Lead Frame	Copper alloy	7.04E-02	Copper	35.64	37.84	
			Nickel	34.28	36.23	7440-50-8
			Silicon	1.07	1.14	7439-89-6
			Magnesium	0.23	0.25	7440-66-6
			Silver (DP)	0.05	0.06	7439-95-4
				0.00	0.17	7440-22-4
Encapsulation	Epoxy	1.12E-01	Silica	56.43	59.92	
			Carbon Black	34.90	46.54	
			Resin	0.00	0.87	
			Antimony Compound	8.73	20.07	1309-64-4
			Brominated Compound	0.29	1.75	
				0.87	2.33	68541-56-0
Plating	Solder	6.32E-03	Tin	1.10	5.49	
			Lead	0.93	4.67	7440-31-5
	or Lead-free Solder	6.32E-03	Tin	0.16	0.82	7439-92-1
Chip	Silicon and inorganic compounds	1.78E-03	Tin	1.10	5.49	7440-31-5
				1.10	5.49	
Die Attach	Adhesive	1.93E-04	Silicon and trace metals	0.88	0.98	7440-21-3
			Silver	0.88	0.98	
Wire Bond	Gold Wire	1.19E-03	Resin	0.10	0.11	
				0.07	0.08	7440-22-4
			Gold	0.02	0.03	
				0.59	0.65	
				0.59	0.65	7440-57-5



## Materials Disclosure Disclaimer

The information provided in this Materials Disclosure is, to our knowledge, correct. However, there is no guarantee to completeness or accuracy, as some information is derived from data sources outside the company. Also, there may not be information included in this statement regarding the minute amounts of dopant and metal materials contained within the electrically active or passive devices contained within the finished product.