

# Fairchild Semiconductor Product Package Material Disclosure

Package Type	TO-3PN-3					
Weight of Package (grams)	Maximum	5.60				
	Minimum	5.27				
Component	Material	Weight in grams	Substance in material	Wt% in finished product min	Wt% in finished product max	CAS #
<b>Lead Frame</b>	Copper alloy	3.62	Copper	64.64	68.64	
			Iron	64.54	68.45	7440-50-8
			Phosphorus	0.05	0.05	7439-89-6
			Zinc	0.02	0.02	7723-14-0
			Silver (internal plating)	0.03	0.03	7440-66-6
				0.00	0.09	7440-22-4
<b>Encapsulation</b>	Epoxy	1.74	Silica	31.05	32.97	
			Carbon Black	19.21	25.61	
			Resin	0.00	0.48	
			Antimony Compound	4.80	11.04	1309-64-4
			Brominated Compound	0.16	0.96	
				0.48	1.28	79-94-7
<b>Plating</b>	Solder	2.65E-02	Tin	0.16	0.81	
			Lead	0.14	0.69	7440-31-5
	<b>or</b> Lead-free Solder	2.65E-02	Tin	0.02	0.12	7439-92-1
				0.16	0.81	
<b>Chip</b>	Silicon and inorganic compounds	4.18E-02		0.16	0.81	
			Silicon and trace metals	0.73	0.81	7440-21-3
<b>Die Attach</b>	Soft solder	1.84E-03	Lead	0.73	0.81	
			Tin	0.73	0.81	7440-21-3
			Silver	0.03	0.04	
				0.03	0.03	7439-92-1
<b>Wire Bond</b>	Aluminum wire	3.00E-03		< 0.01	< 0.01	7440-31-5
				< 0.01	< 0.01	7440-22-4
			Aluminum	< 0.01	< 0.01	
			0.05	0.06		
			0.05	0.06	7429-90-5	



## 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.