



TO-220 Material Safety Data Sheet

Material Content Declaration					
Material name	Substance name e.g. Copper (Cu), Gold (Au)	CAS no., if known	Substance mass (mg)	% OF Weight (%)	ppm Of Total Weight
Lead Wire 62.79%	Copper (Cu)	7440-50-8	1,181.962	99.9790	372,010.3
	Phosphorus (P)	7723-14-0	0.011	0.0009	6.9
	Arsenic (As)	7440-38-2	0.011	0.0009	6.9
	Tin (Sn)	7440-31-5	0.011	0.0009	6.9
	Oxygen (O)	7782-44-7	0.006	0.0005	3.4
	Sulfur (S)	7704-34-9	0.141	0.0119	82.8
	Iron (Fe)	7439-89-6	0.008	0.0007	4.6
	Nickel (Ni)	7440-02-0	0.003	0.0006	2.1
	Bismuth (Bi)	7440-69-9	0.024	0.0020	13.8
	Antimony (Sb)	1309-64-4	0.024	0.0020	13.8
	Lead (Pb)	7439-92-1	0.006	0.0005	3.4
	Zinc (Zn)	7440-66-6	0.003	0.0003	2.1
	Total		1,182.21		
Solder Wafer 0.45%	Lead (Pb)	7439-92-1	7.70	92.66	8,625.1
	Tin (Sn)	7440-31-5	0.41	4.93	484.7
	Silver (Ag)	7440-22-4	0.20	2.41	242.0
	Total		8.31		
Chip 0.38%	Silicon (Si)	7440-21-3	6.98	95.40	3,709.3
	Lead (Pb)	7439-92-1	0.34	4.60	178.9
	Total		7.32		
Molding 36.32%	Epoxy	38891-59-7	683.80	100.00	603,257.2
	Total		683.80		
Plating 0.06%	Tin (Sn)	7440-31-5	1.01	100.00	536.5
	Total		1.01		
	Total mass (mg)		1,882.65		