



 MICROCHIP						Package Homogeneous Materials						
Semiconductor Device Type:			3TX		WFBGA-48-4x6x0.73mm-SAC							
Basic Substance	CAS Number	"Contained In" Sub-Component	% Total Weight	mg/part	ppm	14.50	(mg) Total	Mold Compound	% of Total Weight	50.51		
Fused Silica	60676-86-0	Mold Compound	39.14	11.23	391401		Fused Silica	60676-86-0	77.49			
Epoxy Resin	Trade Secret	Mold Compound	4.93	1.41	49265		Epoxy Resin	Trade Secret	9.75			
Epoxy Phenol Resin	Trade Secret	Mold Compound	4.93	1.41	49265		Epoxy Phenol Resin	Trade Secret	9.75			
Crystalline Silica	14808-60-7	Mold Compound	1.26	0.36	12647		Crystalline Silica	14808-60-7	2.50			
Carbon Black	1333-86-4	Mold Compound	0.25	0.07	2509		Carbon Black	1333-86-4	0.50			
Copper	7440-50-8	Lead Frame	8.62	2.47	86161	6.89	(mg) Total	Lead Frame	% of Total Weight	24.00		
Glass fibers	65997-17-3	Lead Frame	5.14	1.47	51355							
Phenol, formaldehyde, (chloromethyl)oxirane polymer	9003-36-5	Lead Frame	5.14	1.47	51355							
Silica, chemically prepared	7631-86-9	Lead Frame	1.92	0.55	19197		Copper	7440-50-8	35.90			
Nickel	7440-02-0	Lead Frame	0.94	0.27	9372		Glass fibers	65997-17-3	21.40			
Barite	7727-43-7	Lead Frame	0.60	0.17	5993	Phenol, formaldehyde, (chloromethyl)oxirane polymer						
Magnesium silicate	14807-96-6	Lead Frame	0.48	0.14	4808		Silica, chemically prepared	7631-86-9	8.00			
Araldite GY 250	25068-38-6	Lead Frame	0.48	0.14	4808		Nickel	7440-02-0	3.91			
(2-Methoxymethylethoxy)propanol	34590-94-8	Lead Frame	0.19	0.06	1916		Barite	7727-43-7	2.50			
Misc.	Trade Secret	Lead Frame	0.36	0.10	3589		Magnesium silicate	14807-96-6	2.00			
Aluminium-hydroxide-oxide	24623-77-6	Lead Frame	0.12	0.03	1185		Araldite GY 250	25068-38-6	2.00			
Gold	7440-57-5	Lead Frame	0.02	0.01	244		(2-Methoxymethylethoxy)propanol	34590-94-8	0.80			
Solid Epoxy Resin	Trade Secret	Die Attach	0.02	0.01	209		Misc.	Trade Secret	1.50			
Phenol Resin	Trade Secret	Die Attach	0.02	0.01	209		Aluminium-hydroxide-oxide	24623-77-6	0.49			
Fused Silica	60676-86-0	Die Attach	0.05	0.02	523		Gold	7440-57-5	0.10			
Liquid epoxy resin	Trade Secret	Die Attach	0.02	0.01	209	Total100.00						
Synthetic Rubber	Trade Secret	Die Attach	0.02	0.01	209							
Silicon	7440-21-3	Die	5.98	1.72	59787	0.04	(mg) Total	Die Attach	% of Total Weight	0.14		
Gold	7440-57-5	Wire Bond	1.87	0.54	18709		Solid Epoxy Resin	Trade Secret	15.38			
Tin	7440-31-5	Lead Plating	16.72	4.80	167201		Phenol Resin	Trade Secret	15.38			
Silver	7440-22-4	Lead Plating	0.70	0.20	7003		Fused Silica	60676-86-0	38.46			
Copper	7440-50-8	Lead Plating	0.09	0.03	871		Liquid epoxy resin	Trade Secret	15.38			
TOTALS:						100.00	28.70	1,000,000	Synthetic Rubber	Trade Secret	15.38	
28.70 mg Total Mass						Total100.00						
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							Silicon	7440-21-3	100.00			
						Total				100.00		
						0.54	(mg) Total	Wire Bond	% of Total Weight	1.87		
							Gold	7440-57-5	0.00			
						Total				0.00		
						5.03	(mg) Total	Lead Plating	% of Total Weight	17.51		
							Tin	7440-31-5	95.50			
							Silver	7440-22-4	4.00			
							Copper	7440-50-8	0.50			
28.70						Total	100.00	100.00				