



MICROCHIP			Termination Base Alloy: Copper Alloy (Cu)			Package Homogeneous Materials: 8.1 Electronics (e.g. pc boards, displays)			JEDEC 97 Product Marking and/or Pkg. Labeling e3				
Semiconductor Device Type: CB (M7X) 003 SOT-23A Matte Tin													
Basic Substance		CAS Number	"Contained In" Sub-Component		% Total Weight	mg/part	ppm	9.42	(mg) Total	Mold Compound	% of Total Weight	63.21	
Silica, vitreous		60676-86-0	Mold Compound		53.729	8.006	537,285	Silica, vitreous		60676-86-0	85.00		
Epoxy Resin (No bromine, No diantimony trioxide)		Trade Secret	Mold Compound		3.872	0.577	38,716	Epoxy Resin		Trade Secret	6.13		
Phenolic Resin (No Br / CL SbO3, No diantimony trioxide)		Trade Secret	Mold Compound		3.872	0.577	38,716	Phenolic Resin		Trade Secret	6.13		
Epoxy, Cresol Novolac		29690-82-2	Mold Compound		1.549	0.231	15,486	Epoxy, Cresol Novolac		29690-82-2	2.45		
Carbon Black		1333-86-4	Mold Compound		0.190	0.028	1,896	Carbon Black		1333-86-4	0.30		
Copper		7440-50-8	Lead Frame		27.037	4.029	270,371	Total		100.00			
Iron		7439-89-6	Lead Frame		0.665	0.099	6,651	4.22 (mg) Total		Lead Frame	% of Total Weight	28.3	
Silver		7440-22-4	Lead Frame		0.539	0.080	5,391	Copper		7440-50-8	95.54		
Zinc		7440-66-6	Lead Frame		0.035	0.005	354	Iron		7439-89-6	2.35		
Phosphorous		7723-14-0	Lead Frame		0.023	0.003	233	Silver		7440-22-4	1.91		
Metal oxide		Trade Secret	Die Attach		0.845	0.126	8,448	Zinc		7440-66-6	0.13		
Epoxy resins		Trade Secret	Die Attach		0.845	0.126	8,448	Phosphorous		7723-14-0	0.08		
Glycol ethers		Trade Secret	Die Attach		0.640	0.095	6,400	Total		100.00			
Curing / Hardener		Trade Secret	Die Attach		0.230	0.034	2,304	0.38 (mg) Total		Die Attach	% of Total Weight	2.56	
Silicon		7440-21-3	Chip (Die)		3.170	0.472	31,700	Metal oxide		Trade Secret	33.00		
Gold		7440-57-5	Wire Bond		0.740	0.110	7,400	Epoxy resins		Trade Secret	33.00		
Tin		7440-31-5	Plating on external leads (pins) - Matte Tin / annealed at 150°C for 1 hour		2.020	0.301	20,200	Glycol ethers		Trade Secret	25.00		
TOTALS:					100.000	14.900	1,000,000	Curing / Hardener		Trade Secret	9.00		
Material compilation					0.0149 g Total Mass			Total		100.00			
This semiconductor device and its homogenous materials comply with EU Directives: 2002/95/EC (27 January 2003) & Directive 2011/65/EU (08 June 2011) and 2015/863/EU (31 March 2015) and 2002/53/EC (End-of-Life Vehicles (ELV) without exemption (zero)													
Compliance with the above EU Directives has been verified via internal design controls, supplier declarations, and /or analytical test data.													
If a chemical substance is absent from the list above, the chemical substance is NOT an intentional ingredient in the semiconductor device and, to the best of Microchip Technology Incorporated's knowledge and belief as of the date of this document, there is no credible reason to believe that the unavoidable impurity concentration of the chemical substance, if any, is not below the threshold of regulatory concern for any regulatory scheme world-wide.													
Molding compounds used by Microchip meet the UL94 V0 flammability standard for plastics. You can access the UL IQTM family of databases to obtain a test report at http://ul.com/global/eng/pages/offerings/industries/chemicals/plastics/													
The protective "tubes" in which the specific product is shipped are made from polyvinyl chloride (PVC) plastic. "Window envelopes" used to hold the packing slip on the outer box and certain "reels" may be made from PVC plastic.													
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Assembled package referenced above is EU REACH compliant based on the latest SVHC candidate list of ECHA which can be found at http://echa.europa.eu/web/guest/candidate-list-table													
								0.47		Total (mg)	Chip (Die)	% of Total Weight	3.17
										Doped Silicon	7440-21-3	100.00	
										Total		100.00	
								0.11		(mg) Total	Wire Bond	% of Total Weight	0.74
										Doped Gold	7440-57-5	100.00	
										Total		100.00	
								0.30		(mg) Total	Plating on external leads (pins) - Matte Tin / annealed at 150°C for 1 hour	% of Total Weight	2.02
										Tin	7440-31-5	100.00	
										Total		100.00	
								14.900		100.000			