



Semiconductor Device Type: CB (M7X) 003 SOT-23A Matte Tin			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																																																																																			
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	9.42	(mg) Total	Mold Compound	% of Total Weight	63.21																																																																																		
Epoxy Resin (No bromine, No diantimony trioxide)	Trade Secret	Mold Compound	3.872	0.577	38,716																																																																																							
Phenolic Resin (No Br / CL SbO3, No diantimony trioxide)	Trade Secret	Mold Compound	3.872	0.577	38,716																																																																																							
Epoxy, Cresol Novolac	29690-82-2	Mold Compound	1.549	0.231	15,486																																																																																							
Carbon Black	1333-86-4	Mold Compound	0.190	0.028	1,896																																																																																							
Copper	7440-50-8	Lead Frame	27.037	4.029	270,371																																																																																							
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																																																																																							
Zinc	7440-66-6	Lead Frame	0.035	0.005	354	0.38	(mg) Total	Die Attach	% of Total Weight	2.56																																																																																		
Phosphorous	7723-14-0	Lead Frame	0.023	0.003	233																																																																																							
Metal oxide	Trade Secret	Die Attach	0.845	0.126	8,448																																																																																							
Epoxy resins	Trade Secret	Die Attach	0.845	0.126	8,448																																																																																							
Glycol ethers	Trade Secret	Die Attach	0.640	0.095	6,400	0.47	Total (mg)	Chip (Die)	% of Total Weight	3.17																																																																																		
Curing / Hardener	Trade Secret	Die Attach	0.230	0.034	2,304																																																																																							
Silicon	7440-21-3	Chip (Die)	3.170	0.472	31,700	0.11	(mg) Total	Wire Bond	% of Total Weight	0.74																																																																																		
Gold	7440-57-5	Wire Bond	0.740	0.110	7,400																																																																																							
Tin	7440-31-5	Plating on external leads (pins) - Matte Tin / annealed at 150°C for 1 hour	2.020	0.301	20,200	0.30	(mg) Total	Plating on external leads (pins) - Matte Tin / annealed at 150°C for 1 hour	% of Total Weight	2.02																																																																																		
<b>TOTALS:</b>			<b>100.000</b>	<b>14.900</b>	<b>1,000,000</b>																																																																																							
<b>Material compilation</b>			<b>0.0149 g Total Mass</b>																																																																																									
<p>This semiconductor device and its homogenous materials comply with EU Directives: 2002/95/EC (27 January 2003) &amp; 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)</p> <p>Compliance with the above EU Directives has been verified via internal design controls, supplier declarations, and /or analytical test data.</p> <p>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.</p> <p>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 <a href="http://ul.com/global/eng/pages/offerings/industries/chemicals/plastics/">http://ul.com/global/eng/pages/offerings/industries/chemicals/plastics/</a></p> <p>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.</p> <p>Microchip Technology Incorporated believes the information in this form concerning substances restricted by RoHS in Microchip Technology Incorporated's semiconductor devices in their original packing materials is true and correct to the best of its knowledge and belief, as of the date listed in this form. 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