



Semiconductor Device Type: OG (K3X) 024 SOIC .300in 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	462.27	(mg) Total	Mold Compound	% of Total Weight	69.83
Silica, vitreous	60676-86-0	Mold Compound	59.356	392.933	593.555	462.27	(mg) Total	Mold Compound	% of Total Weight	69.83
Epoxy Resin (No bromine, No diantimony trioxide)	Trade Secret	Mold Compound	4.277	28.314	42.771					
Phenolic Resin (No Br / CL SbO3, No diantimony trioxide)	Trade Secret	Mold Compound	4.277	28.314	42.771					
Epoxy, Cresol Novolac	29690-82-2	Mold Compound	1.711	11.326	17.108					
Carbon Black	1333-86-4	Mold Compound	0.209	1.387	2.095					
Copper	7440-50-8	Lead Frame	25.757	170.511	257.569					
Iron	7439-89-6	Lead Frame	0.634	4.194	6.336	178.48	(mg) Total	Lead Frame	% of Total Weight	26.96
Silver	7440-22-4	Lead Frame	0.514	3.400	5.136					
Zinc	7440-66-6	Lead Frame	0.034	0.223	0.337					
Phosphorous	7723-14-0	Lead Frame	0.022	0.147	0.222					
Silver	7440-22-4	Die Attach	0.326	2.155	3.256					
Epoxy resin	Trade Secret	Die Attach	0.088	0.583	0.880					
Metal oxide	Trade Secret	Die Attach	0.013	0.087	0.132	2.91	(mg) Total	Die Attach	% of Total Weight	0.44
Gamma-butyrolactone	96-48-0	Die Attach	0.013	0.087	0.132					
Silicon	7440-21-3	Chip (Die)	2.010	13.306	20.100					
Gold	7440-57-5	Wire Bond	0.090	0.596	0.900					
Tin	7440-31-5	Plating on external leads (pins) - Matte Tin / annealed at 150°C for 1 hour	0.670	4.435	6.700					
<b>TOTALS:</b>			<b>100.000</b>	<b>662.000</b>	<b>1,000.000</b>					
<b>0.6620 g Total Mass</b>										
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 <a href="http://ul.com/global/eng/pages/offerings/industries/chemicals/plastics/">http://ul.com/global/eng/pages/offerings/industries/chemicals/plastics/</a>										
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 <a href="http://echa.europa.eu/web/guest/candidate-list-table">http://echa.europa.eu/web/guest/candidate-list-table</a>										
							662.000			100.000