



Semiconductor Device Type: DSA 010 MSOP 3x3x1.0mm MatteTin			Termination Base Alloy: Copper Alloy (Cu)			Package Homogeneous Materials: 8.1 Electronics (e.g. pc boards, displays)			J-STD-609A Product Marking and/or Pkg. Labeling e3
Basic Substance	CAS Number	"Contained In" Sub-Component	% Total Weight	mg/part	ppm	(mg) Total	Mold Compound	% of Total Weight	
Silica, vitreous	60676-86-0	Mold Compound	40.044	9.931	400.435	11.68	Silica, vitreous 60676-86-0 Epoxy Resin Trade Secret Phenolic Resin Trade Secret Epoxy, Cresol Novolac 29690-82-2 Carbon Black 1333-86-4	85.00 6.13 6.13 2.45 0.30	47.11
Epoxy Resin	Trade Secret	Mold Compound	2.885	0.716	28.855				
Phenolic Resin	Trade Secret	Mold Compound	2.885	0.716	28.855				
Epoxy, Cresol Novolac	29690-82-2	Mold Compound	1.154	0.286	11.542				
Carbon Black	1333-86-4	Mold Compound	0.141	0.035	1.413				
Copper	7440-50-8	Lead Frame	39.554	9.809	395.536				
Nickel	7440-02-0	Lead Frame	1.055	0.262	10.549	10.30	Lead Frame 7440-50-8 Copper 7440-02-0 Nickel 7440-22-4 Silver 7440-21-3 Silicon 7440-21-3 Magnesium 7439-95-4	95.24 2.54 1.67 0.45 0.10	41.53
Silver	7440-22-4	Lead Frame	0.693	0.172	6.931				
Silicon	7440-21-3	Lead Frame	0.187	0.046	1.869				
Magnesium	7439-95-4	Lead Frame	0.042	0.010	415				
Silver	7440-22-4	Die Attach	1.290	0.320	12.900				
Epoxy Resin	9003-36-5	Die Attach	0.430	0.107	4.300				
Silicon	7440-21-3	Chip (Die)	6.500	1.612	65.000	0.43	Die Attach 7440-22-4 Silver 9003-36-5	75.00 25.00	1.72
Gold	7440-57-5	Wire Bond	0.640	0.159	6.400				
Tin	7440-31-5	Plating on external leads (pins) - Matte Tin / annealed at 150°C for 1 hour	2.500	0.620	25.000				
<b>TOTALS:</b>			<b>100.000</b>	<b>24.800</b>	<b>1,000,000</b>	<b>Total</b>			<b>100.00</b>
<b>0.0248 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/offering/industries/chemicals/plastics/">http://ul.com/global/eng/pages/offering/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>									
						24.80			100.00