



Semiconductor Device Type: UN (E3X) 010 MSOP 3x3mm 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	6.66	(mg) Total	Mold Compound	% of Total Weight	28.71
Silica, vitreous	60676-86-0	Mold Compound	24.404	5.662	244,035			Silica, vitreous	60676-86-0	85.00
Epoxy Resin (No Br / No diantimony trioxide)	Trade Secret	Mold Compound	1.758	0.408	17,585			Epoxy Resin	Trade Secret	6.13
Phenolic Resin (No Br / CL SbO3, No diantimony trioxide)	Trade Secret	Mold Compound	1.758	0.408	17,585			Phenolic Resin	Trade Secret	6.13
Epoxy, Cresol Novolac	29690-82-2	Mold Compound	0.703	0.163	7,034			Epoxy, Cresol Novolac	29690-82-2	2.45
Carbon Black	1333-86-4	Mold Compound	0.086	0.020	861			Carbon Black	1333-86-4	0.30
								Total		100.00
Copper	7440-50-8	Lead Frame	42.830	9.937	428,299	10.43	(mg) Total	Lead Frame		44.97
Nickel	7440-02-0	Lead Frame	1.142	0.265	11,422			Copper	7440-50-8	95.24
Silver	7440-22-4	Lead Frame	0.751	0.174	7,505			Nickel	7440-02-0	2.54
Silicon	7440-21-3	Lead Frame	0.202	0.047	2,024			Silver	7440-22-4	1.67
Magnesium	7439-95-4	Lead Frame	0.045	0.010	450			Silicon	7440-21-3	0.45
Silver	7440-22-4	Die Attach	0.601	0.139	6,006			Magnesium	7439-95-4	0.10
Acrylate resins Proprietary	Trade Secret	Die Attach	0.139	0.032	1,386			Total		100.00
Treated silica	Trade Secret	Die Attach	0.015	0.004	154	0.18	(mg) Total	Die Attach		0.77
Heterocyclic organic compound	Trade Secret	Die Attach	0.015	0.004	154			Silver	7440-22-4	78.00
Silicon	7440-21-3	Chip (Die)	2.800	0.650	28,000			Acrylate resins Proprietary	Trade Secret	18.00
Gold	7440-57-5	Wire Bond	0.680	0.158	6,800			Treated silica	Trade Secret	2.00
Tin	7440-31-5	Plating on external leads (pins) - Matte Tin / annealed at 150°C for 1 hour	22.070	5.120	220,700			Heterocyclic organic compound	Trade Secret	2.00
								Total		100.00
0.0232 g Total Mass			TOTALS:	100.000	23.200	1,000,000				
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/offering/industries/chemicals/plastics/										
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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										
						23.200				100.000