

**4 Leads - DMPS**  
**Package Material Declaration**



Date	28-Feb-17	Product name	Integrated Circuit
Package Code	VS	RoHS Compliant	Y
Package Name	Dual Mold package with straight leads	Halogen Free	Y
Product Total Mass (g)	0.25827	Plating	Pure Matte Sn
<b>Product Number</b>	MLX90364		

**Material Declaration**

Part Name	Material Name	Component Weight (g)	Material Component (Element)	CAS #	Element ratio (%)	Material Weight (g)	Ratio total Wt (ppm)		
Leadframe	K75 (C18070)	0.11096	Copper (Cu)	7440-50-8	99.75	0.11069	428575		
			Chromium (Cr)	7440-47-3	0.20	0.00022	859		
			Silicon (Si)	7440-21-3	0.03	0.00003	129		
			Titanium (Ti)	7440-32-6	0.02	0.00002	86		
Frame plating	Ag plating	0.00120	Silver (Ag)	7440-22-4	100	0.00120	4646		
Die	Silicon IC	0.00351	Silicon (Si)	7440-21-3	99.99	0.00351	13589		
			Misc.	-	0.01	0.0000004	1		
IMC	S-FeNi-8	0.000006	Iron (Fe)	7439-89-6	19.75	0.0000012	5		
			Nickel (Ni) (0.0 ~ 80%)	7440-02-0	40	0.0000024	9		
			Molybdenum (Mo) (0.0 ~ 80%)	7439-98-7	40	0.0000024	9		
			others (max. 0.5%)	-	0.25	0.00000002	0.1		
Die attach materials	Silver / Epoxy Adhesive CRM1076WB	0.00095	Silver (Ag)	7440-22-4	80	0.00076	2931		
			Epoxy Resin A	9003-36-5	15	0.00014	550		
			Misc.	-	5	0.00005	183		
Capacitor (4x)	Ceramic element (ZB)	Ceramics	0.01744	Barium oxide, obtained by calcinin	1304-28-5	60	0.01046	40507	
				Titanium dioxide	13463-67-7	30	0.00523	20254	
				Misc.	-	10	0.00174	6751	
	Inner electrode (ZD)	Nickel/Other Nickel alloy	0.002744	0.002744	Nickel (Ni)	7440-02-0	100	0.00274	10625
					Silver (Ag)	7440-22-4	70	0.00177	6852
	Outer electrode (ZF)	Silver/Silver alloy	0.002528	0.002528	Palladium (Pd)	7440-05-3	30	0.00076	2937
					Glass w/o declarable substances	7631-86-9	99	0.00028	1073
					Misc.	-	1	0.00000	11
	Outer electrode (ZG)	Copper	0.001992	0.001992	Copper (Cu)	7440-50-8	100	0.00199	7713
					Glass w/o declarable substances	7631-86-9	99	0.00022	843
Misc.					-	1	0.000002	9	
Capacitor attach materials	Silver / Epoxy Adhesive 84-1LMI	0.00031	Silver (Ag)	7440-22-4	80	0.00025	957		
			Epoxy Resin	Trade Secret	15	0.00005	179		
			Misc.	-	5	0.00002	60		
Wire	Pd doped Gold	0.00028	Gold (Au)	7440-57-5	99	0.00028	1089		
			Palladium (Pd)	7440-05-3	1	0.000003	11		
Lead Finish	Tin	0.01266	Tin (Sn)	7440-31-5	99.99	0.01266	49014		
			Misc.	-	0.01	0.000001	5		
Encapsulation	G600	0.10319	Silica Fused	60676-86-0	87.7	0.09049	350395		
			Phenol Resin	Trade Secret	5	0.00516	19977		
			Epoxy Resin	Trade Secret	5	0.00516	19977		
			Epoxy, Cresol Novolac	29690-82-2	2	0.00206	7991		
			Carbon Black	1333-86-4	0.3	0.00031	1199		

Total package weight (g) 0.25827

**Comments**

- Composition derived from MSDS and material CoC from vendors
- Component weight based on assembly of generic parts
- Reliability qualification reports are available upon request through the appropriate sales or marketing contact
- Third party testing for RoHS substances are available upon request to environment@melexis.com

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