

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



Date	06-Jul-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)	0.25819	Plating	Pure Matte Sn

<b>Product Number</b>	MLX90372
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**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	428703			
			Chromium (Cr)	7440-47-3	0.20	0.00022	860			
			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	4648			
Die	Silicon IC	0.00351	Silicon (Si)	7440-21-3	99.99	0.00351	13593			
			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	0.0000002	0.1			
Die attach materials	Silver / Epoxy Adhesive CRM1076WB	0.00095	Silver (Ag)	7440-22-4	80	0.00076	2932			
			Epoxy Resin A	9003-36-5	15	0.00014	550			
			Misc.	-	5	0.00005	183			
Capacitor (3x)	Ceramic element (ZB)	Ceramics	0.01308	Barium oxide, obtained by calcining witherite	1304-28-5	60	0.00785	30389		
				Titanium dioxide	13463-67-7	30	0.00392	15195		
				Misc.	-	10	0.00131	5065		
	Inner electrode	Nickel/Other Nickel alloy	0.002058	Nickel (Ni)	7440-02-0	100	0.00206	7971		
				Silver (Ag)	7440-22-4	70	0.00133	5140		
	Outer electrode (ZF)	Silver/Silver alloy	0.001896	Palladium (Pd)	7440-05-3	30	0.00057	2203		
				Glass	0.00021	Glass w/o declarable substances	7631-86-9	99	0.00021	805
				Misc.	-	1	0.00000	8		
	Outer electrode (ZG)	Copper	0.001494	Copper (Cu)	7440-50-8	100	0.00149	5786		
				Glass	0.000165	Glass w/o declarable substances	7631-86-9	99	0.00016	633
Misc.				-	1	0.000002	6			
Capacitor attach materials	Silver / Epoxy Adhesive 84-1LMI	0.00023	Silver (Ag)	7440-22-4	80	0.00019	718			
			Epoxy Resin	Trade Secret	15	0.00003	135			
			Misc.	-	5	0.00001	45			
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	49029			
			Misc.	-	0.01	0.000001	5			
Encapsulation	G600	0.10949	Silica Fused	60676-86-0	87.7	0.09602	371899			
			Phenol Resin	Trade Secret	5	0.00547	21203			
			Epoxy Resin	Trade Secret	5	0.00547	21203			
			Epoxy, Cresol Novolac	29690-82-2	2	0.00219	8481			
			Carbon Black	1333-86-4	0.3	0.00033	1272			

**Total package weight (g)** 0.25819

**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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