

**24 Leads - QFN Quad 4x4  
Package Material Declaration**



Date	03-Jan-19	Product name	Integrated Circuit
Package Code	LQ	RoHS Compliant	Y
Package Name	Micro Leadframe Package Quad	Halogen Free	Y
Product Total Mass (g)	0.03131	Plating	Ni/Pd/Au
<b>Product Number</b>	MLX75031		

**Material Declaration**

Part Name	Material Name	Component Weight (g)	Material Component (Element)	CAS #	Element ratio (%)	Material Weight (g)	Ratio total Wt (ppm)
Leadframe	High Copper Alloy C194	0.01350	Copper (Cu)	7440-50-8	97.44	0.01316	420170
			Iron (Fe)	7439-89-6	2.35	0.00032	10133
			Zinc (Zn)	7440-66-6	0.13	0.00002	561
			Phosphorus (P)	7723-14-0	0.08	0.00001	345
Frame plating	Ni/Pd/Au	0.00037	Nickel (Ni)	7440-02-0	97.31	0.00036	11561
			Palladium (Pd)	7440-05-3	2.15	0.00001	255
			Gold (Au)	7440-57-5	0.54	0.000002	64
Die	Silicon	0.00304	Silicon (Si)	7440-21-3	99.99	0.00304	97014
			others	-	0.01	0.0000003	10
Die attach materials	AMK-06	0.00078	Proprietary Acrylates	Proprietary	13	0.00010	3230
			Silver (Ag)	7440-22-4	80	0.00062	19877
			Proprietary Bismaleimide	Proprietary	3	0.00002	745
			Methacrylate Ester	Unknown	3	0.00002	745
			Proprietary polymer	Proprietary	1	0.00001	248
Wire	Palladium doped Gold	0.00007	Gold (Au)	7440-57-5	99	0.00007	2182
			Palladium (Pd)	7440-05-3	1	0.0000007	22
External Plating	Ni/Pd/Au	0.00017	Nickel (Ni)	7440-02-0	97.62	0.00016	5238
			Palladium (Pd)	7440-05-3	1.79	0.000003	96
			Gold (Au)	7440-57-5	0.59	0.000001	32
Encapsulation	CEL 9220HF13A	0.01339	Biphenyl Resin	Proprietary	11	0.00147	47022
			SiO2 Filler	60676-86-0	89	0.01191	380450

**Total package weight (g)** 0.03131

**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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