

**8 Leads - SOIC**  
**Package Material Declaration**



Date	16-Mar-21	Product name	Integrated Circuit
Package Code	DC	RoHS Compliant	Y
Package Name	Plastic Small Outline 150mil	Halogen Free	Y
Product Total Mass (g)	0.07446	Plating	Pure Matte Sn
<b>Product Number</b>	MLX90421		

**Material Declaration**

Part Name	Material Name	Component Weight (g)	Material Component (Element)	CAS #	Element ratio (%)	Material Weight (g)	Ratio total Wt (ppm)
Leadframe	Zirconium Copper C151	0.02401	Copper (Cu) (remaining)	7440-50-8	99.9	0.02399	322150
			Zirconium (Zr) (0.05~0.15%)	7440-67-7	0.1	0.00002401	322
Plating	Silver	0.00024	Silver (Ag)	7440-22-4	100	0.00024	3223
Die	Silicon	0.00302	Silicon (Si)	7440-21-3	99.99	0.00302	40557
			others	-	0.01	0.0000003	4
IMC	S-FeNi-8	0.000006	Iron (Fe)	7439-89-6	19.75	0.0000012	16
			Nickel (Ni) (0.0 ~ 80%)	7440-02-0	40	0.0000024	32
			Molybdenum (Mo) (0.0 ~ 80%)	7439-98-7	40	0.0000024	32
			others (max. 0.5%)	-	0.25	0.00000002	0.2
Die attach material	Silver-Epoxy Adhesive 8290	0.00113	Silver (Ag)	7440-22-4	75	0.00085	11383
			Epoxy Resin	-	15	0.00017	2277
			Further additives	-	10	0.00011	1518
Wire	Gold with Palladium	0.00030	Gold (Au)	7440-57-5	99	0.00030	3989
			Palladium (Pd)	7440-05-3	1	0.000003	40.3
Lead Finish	Tin	0.00137	Tin (Sn)	7440-31-5	99.99	0.00137	18398
			Others	-	0.01	0.0000001	2
Encapsulation	Silica EP G700HA	0.04438	Silica fused	60676-86-0	79.1	0.03510	471481
			Silicon dioxide	7631-86-9	5.8	0.00257	34571
			Epoxy Resin	-	8.3	0.00368	49473
			Phenol Resin	-	6.3	0.00280	37552
			Carbon Black	1333-86-4	0.5	0.00022	2980

**Total package weight (g)** 0.07446

**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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