

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



Date	24-Nov-16	Product name	Integrated Circuit
Package Code	DC	RoHS Compliant	Y
Package Name	Plastic Small Outline 150mil	Halogen Free	Y
Product Total Mass (g)	0.11181	Plating	Pure Matte Sn
<b>Product Number</b>	MLX90316		

**Material Declaration**

Part Name	Material Name	Component Weight (g)	Material Component (Element)	CAS #	Element ratio (%)	Material Weight (g)	Ratio total Wt (ppm)
Leadframe	Ag plated Cu C151	0.02425	Copper (Cu) (remaining)	7440-50-8	98.9393	0.02399	214593
			Iron (Fe) (0.005 max)	7439-89-6	0.0001	0.0000002	0.2
			Manganese (Mn) (0.005 max)	7439-96-5	0.0001	0.0000002	0.2
			Aluminum (Al) (0.005 max)	7429-90-5	0.0005	0.0000001	1
			Zirconium (Zr) (0.05~0.15%)	7440-67-7	0.06	0.00001	130
			Silver (Ag) (0.5 ~ 1.5%)	7440-22-4	1	0.00024	2169
Die	Silicon IC	0.00302	Silicon (Si)	7440-21-3	99.99	0.00302	27008
			others	-	0.01	0.0000003	3
IMC	S-FeNi-8	0.000006	Iron (Fe)	7439-89-6	19.75	0.0000012	11
			Nickel (Ni) (0.0 ~ 80%)	7440-02-0	40	0.0000024	21
			Molybdenum (Mo) (0.0 ~ 80%)	7439-98-7	40	0.0000024	21
			others (max. 0.5%)	-	0.25	0.0000002	0.1
Die attach material	Conductive epoxy 84LMISR-4	0.00113	Silver Ag (70~85%)	7440-22-4	80	0.00090	8085
			Epoxy resin (5~25%)	Proprietary	15	0.00017	1516
			Aromatic amine (1~10%)	Proprietary	5	0.00006	505
Wire	Gold	0.00030	Gold (Au)	7440-57-5	99.99	0.00030	2683
			Others	-	0.01	0.0000003	0.3
Lead Finish	Alloy	0.00137	Tin (Sn)	7440-31-5	99.99	0.00137	12252
			Others	-	0.01	0.0000001	1
Encapsulation	Epoxy resin G600C	0.08173	Silica fused (75~95%)	60676-86-0	87.7	0.07168	641086
			Epoxy Resin (2~8%)	Proprietary	5	0.00409	36550
			Epoxy, Cresol Novolac (1~3%)	29690-82-2	2	0.00163	14620
			Phenol Resin (2~8%)	Proprietary	5	0.00409	36550
			Carbon Black (0.1~0.5%)	1333-86-4	0.3	0.00025	2193

Total package weight (g) 0.11181

**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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