

**3 Leads - TSOT  
Package Material Declaration**



Date	28-Mar-19	Product name	Integrated Circuit
Package Code	SE	RoHS Compliant	Y
Package Name	Thin Small Outline Transistor	Halogen Free	Y
Product Total Mass (g)	0.01118	Plating	Pure Matte Sn

**Product Number** MLX92242

**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	0.00453	Copper (Cu)	7440-50-8	97.45	0.00441	395032
			Iron (Fe)	7439-89-6	2.4	0.00011	9729
			Zinc (Zn)	7440-66-6	0.12	0.00001	486
			Phosphorus (P)	7723-14-0	0.03	0.000001	122
Frame plating	Silver	0.00015	Silver (Ag)	7440-22-4	100	0.00015	13423
Die	Silicon	0.00076	Silicon (Si)	7440-21-3	99.99	0.00076	67913
			others	-	0.01	0.0000001	7
IMC	S-FeNi-8	0.000006	Iron (Fe)	7439-89-6	19.75	0.000001	106
			Nickel (Ni) (0.0 ~ 80%)	7440-02-0	40	0.000002	215
			Molybdenum (Mo) (0.0 ~ 80%)	7439-98-7	40	0.000002	215
			others (max. 0.5%)	-	0.25	0.00000002	1
Die attach material	Epoxy 84-1 LMISR4	0.00034	Epoxy resin	Proprietary	20	0.00007	6085
			Silver (Ag)	7440-22-4	75	0.00026	22819
			Aromatic amine	Proprietary	5	0.00002	1521
Wire	Gold	0.00002	Gold (Au)	7440-57-5	99	0.00002	1772
			Palladium (Pd)	7440-05-3	1	0.0000002	18
Lead Finish	Tin	0.00026	Tin (Sn)	7440-31-5	99.99	0.00026	23264
			others	-	0.01	0.00000003	2
Encapsulation	Epoxy resin G600	0.00511	Multi aromatic resin	Proprietary	7.5	0.00038	34295
			Silica fused	60676-86-0	86	0.00439	393253
			Carbon Black	1333-86-4	0.5	0.00003	2286
			Epoxy Cresol Novolac	29690-82-2	2	0.00010	9145
			Phenol resin	Proprietary	4	0.00020	18291

**Total package weight (g)** 0.01118

**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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