

**3 Leads - TO92**  
**Package Material Declaration**



Date	25-Jan-18	Product name	Integrated Circuit
Package Code	UA	RoHS Compliant	Y
Package Name	Plastic Single in Line, Through Hole Mount	Halogen Free	N
Product Total Mass (g)	0.09796	Plating	Pure Matte Sn

<b>Product Number</b>	MLX90242
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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	Copper-Tin-Phosphorous Alloy EFTEC-3S	0.06683	Copper (Cu)	7440-50-8	99.84	0.06672	681112
			Tin (Sn)	7440-31-5	0.15	0.00010	1023
			Phosphorus (P)	7723-14-0	0.01	0.00001	68
Frame plating	Ag plating	0.00144	Silver (Ag)	7440-22-4	100	0.00144	14698
Die	Silicon IC	0.00076	Silicon (Si)	7440-21-3	99.99	0.00076	7747
			others	-	0.01	0.0000001	1
Die attach material	Ablebond 8340	0.00011	Silver (Ag)	7440-22-4	78	0.00009	885
			Epoxy Resin	Trade Secret	20	0.00002	227
			Metal	Trade Secret	2	0.00000	23
Wire	Gold	0.00019	Gold (Au)	7440-57-5	99.99	0.00019	1930
			others	-	0.01	0.00000002	0.2
Lead Finish	Tin	0.00259	Tin (Sn)	7440-31-5	99.99	0.00259	26424
			others	-	0.01	0.0000003	3
Encapsulation	MP-190NS	0.02563	Silica	7631-86-9	70	0.01794	183118
			Epoxy	Trade Secret	25	0.00641	65399
			Antimony Trioxide	1309-64-4	3	0.00077	7848
			Carbon Black	1333-86-4	1	0.00026	2616
			Amine Compound	Trade Secret	1	0.00026	2616
Gel Coat	Q1-4939	0.00042	Silicone	Trade Secret	72	0.00030	3069
			Dimethyl, Methylhydrogen Siloxane	68037-59-2	1.1	0.00005	47
			Octamethylcyclotetrasiloxane	556-67-2	25	0.00010	1065
			Decamethylcyclopentasiloxane	541-02-6	1.65	0.00001	70
			Hexamethyl cyclotrisiloxane	541-05-9	0.25	0.000001	11

**Total package weight (g)** 0.09796

**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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