

16 Leads - TSSOP
Package Material Declaration



Date	28-Mar-19	Product name	Integrated Circuit
Package Code	GO	RoHS Compliant	Y
Package Name	Thin Plastic Shrink Small Outline 173mil	Halogen Free	Y
Product Total Mass (g)	0.05963	Plating	Pure Matte Sn
Product Number	MLX90324		

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 C7025	0.01900	Copper (Cu) (remaining)	7440-50-8	95.83	0.01821	305318
			Iron (Fe) (0.2 max)	7439-89-6	0.02	0.000004	64
			Lead (Pb) (0.005 max)	7439-92-1	0.001	0.0000002	3
			Cobalt (Co) (0.4 max)	7440-48-4	0.2	0.00004	637
			Nickel (Ni) (2.2~4.2%)	7440-02-0	2.28	0.00043	7265
			Zinc (Zn) (1.0 max)	7440-66-6	0.02	0.000004	64
			Manganese (Mn) (0.10 max)	7439-96-5	0.004	0.000001	13
			Silicon (Si) (0.25~1.2%)	7440-21-3	0.52	0.00010	1657
			Magnesium (Mg) (0.05~0.3%)	7439-95-4	0.13	0.00002	414
			Silver (Ag) (0.5~1.5%)	7440-22-4	1	0.00019	3186
Die	Silicon IC 1	0.00302	Silicon (Si)	7440-21-3	99.99	0.00302	50639
			others	-	0.01	0.0000003	5
	Silicon IC 2	0.00302	Silicon (Si)	7440-21-3	99.99	0.00302	50639
			others	-	0.01	0.0000003	5
IMC	S-FeNi-8	0.000012	Iron (Fe)	7439-89-6	19.75	0.0000024	40
			Nickel (Ni) (0.0 ~ 80%)	7440-02-0	40	0.0000048	80
			Molybdenum (Mo) (0.0 ~ 80%)	7439-98-7	40	0.0000048	80
			others (max. 0.5%)	-	0.25	0.0000003	1
Die attach material	Conductive epoxy 84-3	0.00067	Quartz (SiO2)	14808-60-7	55	0.00037	6180
			Epoxy resin	-	43.605	0.00029	4899
			Dimethyl silicone polymer with silica	67762-90-7	0.75	0.00001	84
			Diiron-trioxide	1309-37-1	0.25	0.000002	28
			Aluminum oxide	1344-28-1	0.25	0.000002	28
			Titanium-dioxide	13463-67-7	0.075	0.000001	8
			Cu-Phthalocyanin	147-14-8	0.07	0.0000005	8
		0.00067	Quartz (SiO2)	14808-60-7	55	0.00037	6180
			Epoxy resin	-	43.605	0.00029	4899
			Dimethyl silicone polymer with silica	67762-90-7	0.75	0.00001	84
			Diiron-trioxide	1309-37-1	0.25	0.000002	28
			Aluminum oxide	1344-28-1	0.25	0.000002	28
			Titanium-dioxide	13463-67-7	0.075	0.000001	8
			Cu-Phthalocyanin	147-14-8	0.07	0.0000005	8
Wire	Gold	0.00112	Gold (Au)	7440-57-5	99.99	0.00112	18780
			Others	-	0.01	0.0000001	2
Lead Finish	Tin	0.00135	Tin (Sn)	7440-31-5	99.99	0.00135	22637
			Others	-	0.01	0.0000001	2
Encapsulation	Epoxy resin CEL9220HF13V	0.03077	Epoxy resin	Proprietary	7	0.00215	36120
			Phenol resin (2~7%)	Proprietary	5	0.00154	25800
			Silica (74~92%)	60676-86-0	80.8	0.02486	416926
			Carbon black (0.2%)	1333-86-4	0.2	0.00006	1032
			Metal Hydroxide (1~10%)	Proprietary	5	0.00154	25800
			Others (max 3%)	-	2	0.00062	10320

Total package weight (g) 0.05963

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

Disclaimer

"MELEXIS has taken every effort to ensure that the information provided in this document is correct, accurate and up-to-date.

MELEXIS, however, shall not be held liable for any improper or incorrect use of the information described and/or contained herein and assumes no responsibility whatsoever for recipient's or a third party's use of this information. In no event MELEXIS shall be held liable for any direct, indirect, incidental, special, exemplary, or consequential damages (including, but not limited to: procurement of substitute goods or services; loss of use, data, or profits; or business interruption) however caused and on any theory of liability, whether in contract, strict liability, tort (including negligence or otherwise), or any other theory arising in any way out of the use of this system, even if advised of the possibility of such damage.

This disclaimer of liability applies to any damages or injury, whether based on alleged breach of contract, tortious behavior, negligence or any other cause of action".

The content of this document is CONFIDENTIAL & PROPRIETARY. ALL Rights Reserved.