

Material Declaration Form

Page 1

ams AG
Tobelbader Strasse 30
A-8141 Premstaetten, Austria
Tel +43 (0) 3136 500-0



Ordering Code	Package Family	Assembly Material Number	Lead Count	Weight (mg)	Manufacturing Country	Halogen Free	EU RoHS	China RoHS	Release Status	Version
TMG49037	OLGA	300590052	8	14.28	Taiwan	YES	YES	YES	FULL	1

Homogenous Material	Weight (mg)	Symbol	Chemical Substance	Input Ratio (%)	CAS Number	Unit Weight (mg)	Unit Weight (%)	Amount (ppm)	
Substrate	3.18	Au	Gold	0.50	7440-57-5	0.01590	0.11134	1113	
		Cu	Copper	55.00	7440-50-8	1.74900	12.24790	122479	
		Ni	Nickel	2.00	7440-02-0	0.06360	0.44538	4454	
			Bismaleimide Triazine	3.50	35325-39-4	0.11130	0.77941	7794	
			Filament Fiber Glass	25.00	65997-17-3	0.79500	5.56723	55672	
			Inorganic Filler	14.00	21645-51-2	0.44520	3.11765	31176	
	Subtotal:			100.00		3.18000	22.26891	222689	
Solder Mask	0.56	SiO2	Silica	1.00	7631-86-9	0.00560	0.03922	392	
			Barium Sulfate	75.00	7727-43-7	0.42000	2.94118	29412	
			Carbon Black	1.00	1333-86-4	0.00560	0.03922	392	
			Dipropylene glycol monomethyl ether	18.00	34590-94-8	0.10080	0.70588	7059	
			Talc	5.00	14807-96-6	0.02800	0.19608	1961	
	Subtotal:			100.00		0.56000	3.92157	39216	
Adhesive (ASIC)	0.07	Ag	Silver	85.00	7440-22-4	0.05950	0.41667	4167	
			Epoxy Resin	15.00	25928-94-3	0.01050	0.07353	735	
	Subtotal:			100.00		0.07000	0.49020	4902	
IC	0.59	Si	Silicon	100.00	7440-21-3	0.59000	4.13165	41317	
				Subtotal:		100.00	0.59000	4.13165	41317

The information provided in this statement represents ams AG knowledge and belief as of the date that it is provided. ams AG bases its knowledge and belief on information provided by third parties, and makes no representation or warranty as to the accuracy and shall have no liability for the consequences of use of such information. ams AG has taken and continues to take reasonable steps to provide representative and accurate information but may not have conducted destructive testing or chemical analysis on incoming materials and chemicals. ams AG and its suppliers consider certain information to be proprietary, and thus CAS numbers and other limited information may not be available for release.

Material Declaration Form

Page 2

ams AG
Tobelbader Strasse 30
A-8141 Premstaetten, Austria
Tel +43 (0) 3136 500-0



Homogenous Material	Weight (mg)	Symbol	Chemical Substance	Input Ratio (%)	CAS Number	Unit Weight (mg)	Unit Weight (%)	Amount (ppm)
Adhesive (LED)	0.01	Ag	Silver	90.00	7440-22-4	0.00900	0.06303	630
			Neopentyl glycol, monobenzoate monoacrylate	10.00	66671-22-5	0.00100	0.00700	70
Subtotal:				100.00		0.01000	0.07003	700
LED Die (950nm)	0.03	Al	Aluminum	0.70	7429-90-5	0.00021	0.00147	15
		As	Arsenic	5.02	7440-38-2	0.00151	0.01055	105
		Au	Gold	12.69	7440-57-5	0.00381	0.02666	267
		Ga	Gallium	2.89	7440-55-3	0.00087	0.00607	61
		In	Indium	0.00	7440-74-8	0.00000	0.00000	0
		Si	Silicon	78.70	7440-21-3	0.02361	0.16534	1653
Subtotal:				100.00		0.03000	0.21008	2101
Wire	0.06	Au	Gold	100.00	7440-57-5	0.06000	0.42017	4202
Subtotal:				100.00		0.06000	0.42017	4202
LID Epoxy	0.04		Carbon Black	3.00	1333-86-4	0.00120	0.00840	84
			Epoxy Resin	92.00	25085-99-8	0.03680	0.25770	2577
			Silica Dioxide	5.00	67762-90-7	0.00200	0.01401	140
Subtotal:				100.00		0.04000	0.28011	2801
LCP LID	7.04		Carbon Black	5.00	1333-86-4	0.35200	2.46499	24650
			Glass oxide	60.00	65997-17-3	4.22400	29.57983	295798
			Liquid crystal polymers	35.00	147310-94-9	2.46400	17.25490	172549
Subtotal:				100.00		7.04000	49.29972	492997

The information provided in this statement represents ams AG knowledge and belief as of the date that it is provided. ams AG bases its knowledge and belief on information provided by third parties, and makes no representation or warranty as to the accuracy and shall have no liability for the consequences of use of such information. ams AG has taken and continues to take reasonable steps to provide representative and accurate information but may not have conducted destructive testing or chemical analysis on incoming materials and chemicals. ams AG and its suppliers consider certain information to be proprietary, and thus CAS numbers and other limited information may not be available for release.

Material Declaration Form

Page 3

ams AG
Tobelbader Strasse 30
A-8141 Premstaetten, Austria
Tel +43 (0) 3136 500-0

Homogenous Material	Weight (mg)	Symbol	Chemical Substance	Input Ratio (%)	CAS Number	Unit Weight (mg)	Unit Weight (%)	Amount (ppm)
Moldcompound	2.7		2,6-Ditert.butyl-4-Methyl	1.00	128-37-0	0.02700	0.18908	1891
			Epoxy Resin	99.00	25068-38-6	2.67300	18.71849	187185
			Subtotal:	100.00		2.70000	18.90756	189076
Total:	14.28					14.28	100.00000	1000000

The information provided in this statement represents ams AG knowledge and belief as of the date that it is provided. ams AG bases its knowledge and belief on information provided by third parties, and makes no representation or warranty as to the accuracy and shall have no liability for the consequences of use of such information. ams AG has taken and continues to take reasonable steps to provide representative and accurate information but may not have conducted destructive testing or chemical analysis on incoming materials and chemicals. ams AG and its suppliers consider certain information to be proprietary, and thus CAS numbers and other limited information may not be available for release.