

# Material Declaration Form

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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
TMD37253SH245V	OLGA	503020052	8	62.09	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	2.32	Au	Gold	0.50	7440-57-5	0.01160	0.01868	187
		Cu	Copper	55.00	7440-50-8	1.27600	2.05508	20551
		Ni	Nickel	2.00	7440-02-0	0.04640	0.07473	747
			Bismaleimide Triazine	3.50	35325-39-4	0.08120	0.13078	1308
			Filament Fiber Glass	25.00	65997-17-3	0.58000	0.93413	9341
			Inorganic Filler	14.00	21645-51-2	0.32480	0.52311	5231
		<b>Subtotal:</b>				<b>100.00</b>		<b>2.32000</b>
Solder Mask	0.41	SiO2	Silica	1.00	7631-86-9	0.00410	0.00660	66
			Barium Sulfate	75.00	7727-43-7	0.30750	0.49525	4952
			Carbon Black	1.00	1333-86-4	0.00410	0.00660	66
			Dipropylene glycol monomethyl ether	18.00	34590-94-8	0.07380	0.11886	1189
			Talc	5.00	14807-96-6	0.02050	0.03302	330
		<b>Subtotal:</b>				<b>100.00</b>		<b>0.41000</b>
Adhesive (ASIC)	0.04	Ag	Silver	85.00	7440-22-4	0.03400	0.05476	548
			Epoxy Resin	15.00	25928-94-3	0.00600	0.00966	97
		<b>Subtotal:</b>				<b>100.00</b>	<b>0.04000</b>	<b>0.06442</b>
IC	0.37	Si	Silicon	100.00	7440-21-3	0.37000	0.59591	5959
<b>Subtotal:</b>				<b>100.00</b>		<b>0.37000</b>	<b>0.59591</b>	<b>5959</b>

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.

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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	0.01450	145
			Neopentyl glycol, monobenzoate monoacrylate	10.00	66671-22-5	0.00100	0.00161	16
<b>Subtotal:</b>				<b>100.00</b>		<b>0.01000</b>	<b>0.01611</b>	<b>161</b>
LED Die (950nm)	0.02	Al	Aluminum	0.70	7429-90-5	0.00014	0.00023	2
		As	Arsenic	5.02	7440-38-2	0.00100	0.00162	16
		Au	Gold	12.69	7440-57-5	0.00254	0.00409	41
		Ga	Gallium	2.89	7440-55-3	0.00058	0.00093	9
		In	Indium	0.00	7440-74-8	0.00000	0.00000	0
		Si	Silicon	78.70	7440-21-3	0.01574	0.02535	254
<b>Subtotal:</b>				<b>100.00</b>		<b>0.02000</b>	<b>0.03221</b>	<b>322</b>
Wire	0.05	Au	Gold	100.00	7440-57-5	0.05000	0.08053	805
<b>Subtotal:</b>				<b>100.00</b>		<b>0.05000</b>	<b>0.08053</b>	<b>805</b>
LID Epoxy	0.07		Carbon Black	3.00	1333-86-4	0.00210	0.00338	34
			Epoxy Resin	92.00	25085-99-8	0.06440	0.10372	1037
			Silica Dioxide	5.00	67762-90-7	0.00350	0.00564	56
<b>Subtotal:</b>				<b>100.00</b>		<b>0.07000</b>	<b>0.11274</b>	<b>1127</b>
LCP LID	5.09		Carbon Black	5.00	1333-86-4	0.25450	0.40989	4099
			Glass oxide	60.00	65997-17-3	3.05400	4.91867	49187
			Liquid crystal polymers	35.00	147310-94-9	1.78150	2.86922	28692
<b>Subtotal:</b>				<b>100.00</b>		<b>5.09000</b>	<b>8.19778</b>	<b>81978</b>

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Homogenous Material	Weight (mg)	Symbol	Chemical Substance	Input Ratio (%)	CAS Number	Unit Weight (mg)	Unit Weight (%)	Amount (ppm)
Moldcompound	1.72		2,6-Ditert.butyl-4-Methyl	1.00	128-37-0	0.01720	0.02770	277
			Epoxy Resin	99.00	25068-38-6	1.70280	2.74247	27425
		<b>Subtotal:</b>		<b>100.00</b>		<b>1.72000</b>	<b>2.77017</b>	<b>27702</b>
Interposer	51.2	Cu	Copper	5.70	7440-50-8	2.91840	4.70027	47003
			DOPO	5.00	35948-25-5	2.56000	4.12305	41230
			E-Glass Fabric	47.20	65997-17-3	24.16640	38.92157	389216
			Epoxy Resin	39.80	29690-82-2	20.37760	32.81946	328195
			Fillers	2.30	21645-51-2	1.17760	1.89660	18966
			<b>Subtotal:</b>	<b>100.00</b>	<b>51.20000</b>	<b>82.46094</b>	<b>824609</b>	
Solder Paste	0.79	Ag	Silver	3.00	7440-22-4	0.02370	0.03817	382
		Cu	Copper	0.50	7440-50-8	0.00395	0.00636	64
		Sn	Tin	96.50	7440-31-5	0.76235	1.22781	12278
		<b>Subtotal:</b>	<b>100.00</b>	<b>0.79000</b>	<b>1.27235</b>	<b>12723</b>		
<b>Total:</b>	<b>62.09</b>					<b>62.09</b>	<b>100.00000</b>	<b>1000000</b>

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