

# 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
TMD37253SH210V	OLGA	503020015	8	56.8	Taiwan	YES	YES	YES	PROTOS	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	0.02042	204
		Cu	Copper	55.00	7440-50-8	1.27600	2.24648	22465
		Ni	Nickel	2.00	7440-02-0	0.04640	0.08169	817
			Bismaleimide Triazine	3.50	35325-39-4	0.08120	0.14296	1430
			Filament Fiber Glass	25.00	65997-17-3	0.58000	1.02113	10211
			Inorganic Filler	14.00	21645-51-2	0.32480	0.57183	5718
<b>Subtotal:</b>				<b>100.00</b>		<b>2.32000</b>	<b>4.08451</b>	<b>40845</b>
Solder Mask	0.41	SiO2	Silica	1.00	7631-86-9	0.00410	0.00722	72
			Barium Sulfate	75.00	7727-43-7	0.30750	0.54137	5414
			Carbon Black	1.00	1333-86-4	0.00410	0.00722	72
			Dipropylene glycol monomethyl ether	18.00	34590-94-8	0.07380	0.12993	1299
			Talc	5.00	14807-96-6	0.02050	0.03609	361
<b>Subtotal:</b>				<b>100.00</b>		<b>0.41000</b>	<b>0.72183</b>	<b>7218</b>
Adhesive (ASIC)	0.04	Ag	Silver	85.00	7440-22-4	0.03400	0.05986	599
			Epoxy Resin	15.00	25928-94-3	0.00600	0.01056	106
<b>Subtotal:</b>				<b>100.00</b>		<b>0.04000</b>	<b>0.07042</b>	<b>704</b>
IC	0.37	Si	Silicon	100.00	7440-21-3	0.37000	0.65141	6514
<b>Subtotal:</b>				<b>100.00</b>		<b>0.37000</b>	<b>0.65141</b>	<b>6514</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	0.01585	158
			Neopentyl glycol, monobenzoate monoacrylate	10.00	66671-22-5	0.00100	0.00176	18
			<b>Subtotal:</b>	<b>100.00</b>		<b>0.01000</b>	<b>0.01761</b>	<b>176</b>
LED Die (950nm)	0.02	Al	Aluminum	0.70	7429-90-5	0.00014	0.00025	2
		As	Arsenic	5.02	7440-38-2	0.00100	0.00177	18
		Au	Gold	12.69	7440-57-5	0.00254	0.00447	45
		Ga	Gallium	2.89	7440-55-3	0.00058	0.00102	10
		In	Indium	0.00	7440-74-8	0.00000	0.00000	0
		Si	Silicon	78.70	7440-21-3	0.01574	0.02771	277
<b>Subtotal:</b>	<b>100.00</b>		<b>0.02000</b>	<b>0.03521</b>	<b>352</b>			
Wire	0.05	Au	Gold	100.00	7440-57-5	0.05000	0.08803	880
<b>Subtotal:</b>	<b>100.00</b>		<b>0.05000</b>	<b>0.08803</b>	<b>880</b>			
LID Epoxy	0.07		Carbon Black	3.00	1333-86-4	0.00210	0.00370	37
			Epoxy Resin	92.00	25085-99-8	0.06440	0.11338	1134
			Silica Dioxide	5.00	67762-90-7	0.00350	0.00616	62
<b>Subtotal:</b>	<b>100.00</b>		<b>0.07000</b>	<b>0.12324</b>	<b>1232</b>			
LCP LID	5.09		Carbon Black	5.00	1333-86-4	0.25450	0.44806	4481
			Glass oxide	60.00	65997-17-3	3.05400	5.37676	53768
			Liquid crystal polymers	35.00	147310-94-9	1.78150	3.13644	31364
<b>Subtotal:</b>	<b>100.00</b>		<b>5.09000</b>	<b>8.96127</b>	<b>89613</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	0.03028	303
			Epoxy Resin	99.00	25068-38-6	1.70280	2.99789	29979
<b>Subtotal:</b>				<b>100.00</b>		<b>1.72000</b>	<b>3.02817</b>	<b>30282</b>
Interposer	45.91	Cu	Copper	5.70	7440-50-8	2.61687	4.60717	46072
			DOPO	5.00	35948-25-5	2.29550	4.04137	40414
			E-Glass Fabric	47.20	65997-17-3	21.66952	38.15056	381506
			Epoxy Resin	39.80	29690-82-2	18.27218	32.16933	321693
			Fillers	2.30	21645-51-2	1.05593	1.85903	18590
<b>Subtotal:</b>				<b>100.00</b>		<b>45.91000</b>	<b>80.82746</b>	<b>808275</b>
Solder Paste	0.79	Ag	Silver	3.00	7440-22-4	0.02370	0.04173	417
		Cu	Copper	0.50	7440-50-8	0.00395	0.00695	70
		Sn	Tin	96.50	7440-31-5	0.76235	1.34217	13422
<b>Subtotal:</b>				<b>100.00</b>		<b>0.79000</b>	<b>1.39085</b>	<b>13908</b>
<b>Total:</b>	<b>56.8</b>					<b>56.80</b>	<b>100.00000</b>	<b>1000000</b>

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