

# Product Document

# 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
TMD37253SH235V	OLGA	503020046	8	60.09	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	0.01930	193	
		Cu	Copper	55.00	7440-50-8	1.27600	2.12348	21235	
		Ni	Nickel	2.00	7440-02-0	0.04640	0.07722	772	
			Bismaleimide Triazine	3.50	35325-39-4	0.08120	0.13513	1351	
			Filament Fiber Glass	25.00	65997-17-3	0.58000	0.96522	9652	
			Inorganic Filler	14.00	21645-51-2	0.32480	0.54052	5405	
	<b>Subtotal:</b>			<b>100.00</b>		<b>2.32000</b>	<b>3.86088</b>	<b>38609</b>	
Solder Mask	0.41	SiO2	Silica	1.00	7631-86-9	0.00410	0.00682	68	
			Barium Sulfate	75.00	7727-43-7	0.30750	0.51173	5117	
			Carbon Black	1.00	1333-86-4	0.00410	0.00682	68	
			Dipropylene glycol monomethyl ether	18.00	34590-94-8	0.07380	0.12282	1228	
			Talc	5.00	14807-96-6	0.02050	0.03412	341	
	<b>Subtotal:</b>			<b>100.00</b>		<b>0.41000</b>	<b>0.68231</b>	<b>6823</b>	
Adhesive (ASIC)	0.04	Ag	Silver	85.00	7440-22-4	0.03400	0.05658	566	
			Epoxy Resin	15.00	25928-94-3	0.00600	0.00999	100	
	<b>Subtotal:</b>			<b>100.00</b>		<b>0.04000</b>	<b>0.06657</b>	<b>666</b>	
IC	0.37	Si	Silicon	100.00	7440-21-3	0.37000	0.61574	6157	
			<b>Subtotal:</b>			<b>100.00</b>	<b>0.37000</b>	<b>0.61574</b>	<b>6157</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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Page 2

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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	0.01498	150
			Neopentyl glycol, monobenzoate monoacrylate	10.00	66671-22-5	0.00100	0.00166	17
<b>Subtotal:</b>				<b>100.00</b>		<b>0.01000</b>	<b>0.01664</b>	<b>166</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	0.00167	17
		Au	Gold	12.69	7440-57-5	0.00254	0.00422	42
		Ga	Gallium	2.89	7440-55-3	0.00058	0.00096	10
		In	Indium	0.00	7440-74-8	0.00000	0.00000	0
		Si	Silicon	78.70	7440-21-3	0.01574	0.02619	262
<b>Subtotal:</b>				<b>100.00</b>		<b>0.02000</b>	<b>0.03328</b>	<b>333</b>
Wire	0.05	Au	Gold	100.00	7440-57-5	0.05000	0.08321	832
<b>Subtotal:</b>				<b>100.00</b>		<b>0.05000</b>	<b>0.08321</b>	<b>832</b>
LID Epoxy	0.07		Carbon Black	3.00	1333-86-4	0.00210	0.00349	35
			Epoxy Resin	92.00	25085-99-8	0.06440	0.10717	1072
			Silica Dioxide	5.00	67762-90-7	0.00350	0.00582	58
<b>Subtotal:</b>				<b>100.00</b>		<b>0.07000</b>	<b>0.11649</b>	<b>1165</b>
LCP LID	5.09		Carbon Black	5.00	1333-86-4	0.25450	0.42353	4235
			Glass oxide	60.00	65997-17-3	3.05400	5.08238	50824
			Liquid crystal polymers	35.00	147310-94-9	1.78150	2.96472	29647
<b>Subtotal:</b>				<b>100.00</b>		<b>5.09000</b>	<b>8.47063</b>	<b>84706</b>

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Page 3

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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	0.02862	286
			Epoxy Resin	99.00	25068-38-6	1.70280	2.83375	28337
		<b>Subtotal:</b>		<b>100.00</b>		<b>1.72000</b>	<b>2.86237</b>	<b>28624</b>
Interposer	49.2	Cu	Copper	5.70	7440-50-8	2.80440	4.66700	46670
			DOPO	5.00	35948-25-5	2.46000	4.09386	40939
			E-Glass Fabric	47.20	65997-17-3	23.22240	38.64603	386460
			Epoxy Resin	39.80	29690-82-2	19.58160	32.58712	325871
			Fillers	2.30	21645-51-2	1.13160	1.88318	18832
<b>Subtotal:</b>			<b>100.00</b>		<b>49.20000</b>	<b>81.87718</b>	<b>818772</b>	
Solder Paste	0.79	Ag	Silver	3.00	7440-22-4	0.02370	0.03944	394
		Cu	Copper	0.50	7440-50-8	0.00395	0.00657	66
		Sn	Tin	96.50	7440-31-5	0.76235	1.26868	12687
<b>Subtotal:</b>			<b>100.00</b>		<b>0.79000</b>	<b>1.31469</b>	<b>13147</b>	
<b>Total:</b>	<b>60.09</b>					<b>60.09</b>	<b>100.00000</b>	<b>1000000</b>

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