

# Product Document

# 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
TMD37253	OLGA	503020008	8	10.1	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	0.11485	1149
		Cu	Copper	55.00	7440-50-8	1.27600	12.63366	126337
		Ni	Nickel	2.00	7440-02-0	0.04640	0.45941	4594
			Bismaleimide Triazine	3.50	35325-39-4	0.08120	0.80396	8040
			Filament Fiber Glass	25.00	65997-17-3	0.58000	5.74257	57426
			Inorganic Filler	14.00	21645-51-2	0.32480	3.21584	32158
<b>Subtotal:</b>				<b>100.00</b>		<b>2.32000</b>	<b>22.97030</b>	<b>229703</b>
Solder Mask	0.41	SiO2	Silica	1.00	7631-86-9	0.00410	0.04059	406
			Barium Sulfate	75.00	7727-43-7	0.30750	3.04455	30446
			Carbon Black	1.00	1333-86-4	0.00410	0.04059	406
			Dipropylene glycol monomethyl ether	18.00	34590-94-8	0.07380	0.73069	7307
			Talc	5.00	14807-96-6	0.02050	0.20297	2030
<b>Subtotal:</b>				<b>100.00</b>		<b>0.41000</b>	<b>4.05941</b>	<b>40594</b>
Adhesive (ASIC)	0.04	Ag	Silver	85.00	7440-22-4	0.03400	0.33663	3366
			Epoxy Resin	15.00	25928-94-3	0.00600	0.05941	594
<b>Subtotal:</b>				<b>100.00</b>		<b>0.04000</b>	<b>0.39604</b>	<b>3960</b>
IC	0.37	Si	Silicon	100.00	7440-21-3	0.37000	3.66337	36634
<b>Subtotal:</b>				<b>100.00</b>		<b>0.37000</b>	<b>3.66337</b>	<b>36634</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	0.08911	891
			Neopentyl glycol, monobenzoate monoacrylate	10.00	66671-22-5	0.00100	0.00990	99
<b>Subtotal:</b>				<b>100.00</b>		<b>0.01000</b>	<b>0.09901</b>	<b>990</b>
LED Die (950nm)	0.02	Al	Aluminum	0.70	7429-90-5	0.00014	0.00138	14
		As	Arsenic	5.02	7440-38-2	0.00100	0.00994	99
		Au	Gold	12.69	7440-57-5	0.00254	0.02513	251
		Ga	Gallium	2.89	7440-55-3	0.00058	0.00572	57
		In	Indium	0.00	7440-74-8	0.00000	0.00000	0
		Si	Silicon	78.70	7440-21-3	0.01574	0.15584	1558
<b>Subtotal:</b>				<b>100.00</b>		<b>0.02000</b>	<b>0.19802</b>	<b>1980</b>
Wire	0.05	Au	Gold	100.00	7440-57-5	0.05000	0.49505	4950
<b>Subtotal:</b>				<b>100.00</b>		<b>0.05000</b>	<b>0.49505</b>	<b>4950</b>
LID Epoxy	0.07		Carbon Black	3.00	1333-86-4	0.00210	0.02079	208
			Epoxy Resin	92.00	25085-99-8	0.06440	0.63762	6376
			Silica Dioxide	5.00	67762-90-7	0.00350	0.03465	347
<b>Subtotal:</b>				<b>100.00</b>		<b>0.07000</b>	<b>0.69307</b>	<b>6931</b>
LCP LID	5.09		Carbon Black	5.00	1333-86-4	0.25450	2.51980	25198
			Glass oxide	60.00	65997-17-3	3.05400	30.23762	302376
			Liquid crystal polymers	35.00	147310-94-9	1.78150	17.63861	176386
<b>Subtotal:</b>				<b>100.00</b>		<b>5.09000</b>	<b>50.39604</b>	<b>503960</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	0.17030	1703
			Epoxy Resin	99.00	25068-38-6	1.70280	16.85941	168594
			<b>Subtotal:</b>	<b>100.00</b>		<b>1.72000</b>	<b>17.02970</b>	<b>170297</b>
<b>Total:</b>	<b>10.1</b>					<b>10.10</b>	<b>100.00000</b>	<b>1000000</b>

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