

# 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
TMD49033V	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	
			<b>Subtotal:</b>			<b>100.00</b>		<b>3.18000</b>	<b>22.26891</b>
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	
	<b>Subtotal:</b>			<b>100.00</b>		<b>0.56000</b>	<b>3.92157</b>	<b>39216</b>	
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	
	<b>Subtotal:</b>			<b>100.00</b>		<b>0.07000</b>	<b>0.49020</b>	<b>4902</b>	
IC	0.59	Si	Silicon	100.00	7440-21-3	0.59000	4.13165	41317	
			<b>Subtotal:</b>			<b>100.00</b>	<b>0.59000</b>	<b>4.13165</b>	<b>41317</b>

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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	0.06303	630
			Neopentyl glycol, monobenzoate monoacrylate	10.00	66671-22-5	0.00100	0.00700	70
<b>Subtotal:</b>				<b>100.00</b>		<b>0.01000</b>	<b>0.07003</b>	<b>700</b>
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
<b>Subtotal:</b>				<b>100.00</b>		<b>0.03000</b>	<b>0.21008</b>	<b>2101</b>
Wire	0.06	Au	Gold	100.00	7440-57-5	0.06000	0.42017	4202
<b>Subtotal:</b>				<b>100.00</b>		<b>0.06000</b>	<b>0.42017</b>	<b>4202</b>
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
<b>Subtotal:</b>				<b>100.00</b>		<b>0.04000</b>	<b>0.28011</b>	<b>2801</b>
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
<b>Subtotal:</b>				<b>100.00</b>		<b>7.04000</b>	<b>49.29972</b>	<b>492997</b>

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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
			<b>Subtotal:</b>	<b>100.00</b>		<b>2.70000</b>	<b>18.90756</b>	<b>189076</b>
<b>Total:</b>	<b>14.28</b>					<b>14.28</b>	<b>100.00000</b>	<b>1000000</b>

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