



## Materials Declaration Form

<b>IPC Form Type *</b>	1752 Distribute	<b>Version</b>	2
<b>Sectionals *</b>	Material Info Manufacturing Info	<b>Subsectionals *</b>	A-D <i>* : Required Field</i>

Supplier Information			
<b>Company Name *</b>	STMicroelectronics	<b>Response Date *</b>	2018-02-06
<b>Company Unique ID</b>	NL 008751171801		
<b>Contact Name *</b>	Refer to Supplier Comment section		Refer to Supplier Comment section
<b>Contact Phone *</b>	Refer to Supplier Comment section	<b>Contact Email *</b>	Refer to Supplier Comment section
<b>Authorized Representative *</b>	Giovanni Giacobello	<b>Representative Title</b>	ADG MD CHAMPION
<b>Representative Phone *</b>	Refer to Supplier Comment section	<b>Representative Email *</b>	Refer to Supplier Comment section
<b>Supplier Comment</b>	Online Technical Support - STMicroelectronics : <a href="http://www.st.com/web/en/support/support.html">http://www.st.com/web/en/support/support.html</a>		

**Uncertainty Statement**

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**Legal Statement**

<b>Supplier Acceptance *</b>	true	<b>Legal Declaration *</b>	Standard
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**Legal Statement**

Supplier certifies that it gathered the provided information and such information is true and correct to the best of its knowledge and belief, as of the date that Supplier completes this form. Supplier acknowledges that Company will rely on this certification in determining the compliance of its products. Company acknowledges that Supplier may have relied on information provided by others in completing this form, and that Supplier may not have independently verified such information. However, in situations where Supplier has not independently verified information provided by others, Supplier agrees that, at a minimum, its suppliers have provided certifications regarding their contributions to the part(s), and those certifications are at least as comprehensive as the certification in this paragraph. If the Company and the Supplier enter into a written agreement with respect to the identified part(s), the terms and conditions of that agreement, including any warranty rights and/or remedies provided as part of that agreement, will be the sole and exclusive source of the Supplier's liability and the Company's remedies for issues that arise regarding information the Supplier provides in this form.

Product				
Mfr Item Number	Mfr Item Name	Version	Mfr Site	Date
X00619MA5AL2	EGTK*PGGM16Q	A	Z4XA	2018-02-06
Amount	UoM	Unit type	ST ECOPACK Grade	
220	mg	Each	ECOPACK® 2	
Comment	ECOPACK® 2 is STMicroelectronics trade name for ROHS compliant device without Brominated and Chlorinated compound (900ppm) and without Antimony oxide flame retardant ( in each organic material)			

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles	 life.augmented	
Not Applicable	Not Applicable	Not Applicable		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy		
Not Applicable	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape
RAD	4.6X4.6X3.5	3	Through-hole
Comment	Package: TO 92 Soft Solder		

QueryList : RoHS Directive 2011/65/EU-July 2011 – Annex II amended by Directive 2015/863-April 2015			
Query			Response
1 - Product(s) meets EU RoHS requirement without any exemptions			FALSE
2 - Product(s) meets EU RoHS requirements except lead in solder and this usage may qualify under the lead in solder '7b' exemption (other selected exemptions may apply)			FALSE
3 - Product(s) meets EU RoHS requirements by application of the selected exemption(s)			TRUE
4 - Product(s) does not meet EU RoHS requirements and is not under exemptions			FALSE
Exemption Id.	Description		
7a	Lead in high melting temperature type solders (i.e. lead- based alloys containing 85 % by weight or more lead)		
7c-1	Electrical and electronic components containing lead in a glass or ceramic other than dielectric ceramic in capacitors, e.g. piezoelectronic devices, or in a glass or ceramic matrix compound		

QueryList : California Prop65 list, dated 15th December 2017			
Query			Response
1 - The product does not contain identified substance from California Prop 65 List, no exposure to consumers is foreseen			FALSE
2 - The product is containing below substance(s) from California Prop 65 List, no exposure to consumers is foreseen			TRUE
Substance	amount in product (mg)	Application	ppm in product
Nickel	0.01	Die	55
Lead	1.48	Soft solder	6714
Lead-Borate Glass	0.16	Die	709

QueryList : REACH-15th January 2018				
Query				Response
1 - Product(s) does not contain REACH Substances Of Very High Concern above the limits per the definition within REACH				true
CategoryLevel_Name	CategoryLevel_Threshold	amount in product (mg)	Application	ppm in product

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	EGTK*PGGM16Q					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Die	M-011 Other inorganic materials	0.976	mg	supplier	die	Silicon (Si)	7440-21-3		0.765	mg	783811	3477
				supplier	metallization	Aluminium (Al)	7429-90-5		0.027	mg	27664	123
				supplier	metallization	Gold (Au)	7440-57-5		0.003	mg	3075	14
				supplier	passivation	Nickel (Ni)	7440-02-0		0.005	mg	5123	23
				supplier	Passivation	Silicon Oxide	7631-86-9		0.007	mg	7172	32
				supplier	back side metallization	Aluminium (Al)	7429-90-5		0.004	mg	4098	18
				supplier	back side metallization	Gold (Au)	7440-57-5		0.002	mg	2049	9
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.007	mg	7172	32
				JIG - R	glass coating	Lead-Borate Glass	65997-18-4	7c-I-Electrical and e	0.156	mg	159836	709
				supplier	alloy	Copper (Cu)	7440-50-8		100.671	mg	999018	457595
Leadframe	M-004 Copper and its alloys	100.770	mg	supplier	alloy	Phosphorus(P)	12185-10-3		0.030	mg	297	136
				supplier	alloy	Iron(Fe)	7439-89-6		0.069	mg	685	314
				supplier	solder	Silver(Ag)	7440-22-4		0.021	mg	14862	95
Soft solder	Solder	1.413	mg	JIG - R	solder	Lead(Pb)	7439-92-1	7a-Lead in high me	1.321	mg	934890	6005
				supplier	solder	Tin(Sn)	7440-31-5		0.071	mg	50248	323
				supplier	wire	Copper(Cu)	7440-50-8		1.383	mg	1000000	6286
Bonding wires	M-011 Other inorganic materials	1.383	mg	supplier	mold compound	Silicone dioxide (Quartz)	14808-60-7		96.067	mg	849992	436668
				supplier	mold compound	Epoxy Resin	25068-38-6		11.302	mg	99999	51373
				supplier	mold compound	Phenol Resin	29690-82-2		5.086	mg	45000	23118
Encapsulation	M-011 Other inorganic materials	113.021	mg	supplier	mold compound	Carbon Black	1333-86-4		0.566	mg	5009	2573
				supplier	solder alloy	Tin (Sn)	7440-31-5		2.437	mg	1000000	11077
connections coating	Solder	2.437	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		2.437	mg	1000000	11077