



## 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>	2019-06-20
<b>Company Unique ID</b>	NL 008751171B01		
<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 Giapello	<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

**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
STW75N60M6	TSLW*BQ69B62	A	3068	2019-06-20
Amount	UoM	Unit type	ST ECOPACK Grade	
4430.00	mg	Each	ECOPACK2	
	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
NA	NA	NA		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
NA	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
QFN	15.75-20.15-5.15	3	Through-hole	
Comment	TO 247			

QueryList : RoHS Directive 2011/65/EU-July 2011 – Annex II amended by Directive 2015/863-March 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)

QueryList : ELV directive : 2000/53/EC amended 2017/2096 _November 2017	
Query	Response
1 - Product(s) meets EU ELV requirements without any exemptions	FALSE
2 - Product(s) meets EU RoHS requirements by application of the selected exemption(s)	TRUE
Exemption Id.	Description
8e	Lead in high melting temperature type solders (i.e. lead-based alloys containing 85 % by weight or more lead)

QueryList : California Prop65 list, dated 23rd November 2018			
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	1.23	Die - Leadframe	278
Lead	39.45	Soft solder	8904

QueryList : REACH-15th January 2019				
Query				Response
1 - Product(s) does not contain REACH Substances Of Very High Concern above the limits per the definition within REACH				FALSE
CategoryLevel_Name	CategoryLevel_Threshold	amount in product (mg)	Application	ppm in product
Lead	1000 ppm	39.45	Soft solder	8904
2 - Product(s) does not contain REACH Substances Of Very High Concern in any Embedded article nor Homogeneous Material above the limits per the definition within REACH				FALSE
CategoryLevel_Name	CategoryLevel_Threshold	Amount in Embedded Article / Homogeneous Material (mg)	Application - Article / Homogeneous Material	ppm in Article /Homogeneous Material
Lead	1000 ppm	39.446	Soft solder	954993

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	TSLW*BQ69862					
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	34.238	mg	supplier	die	Silicon (Si)	7440-21-3		33.166	mg	968690	7487
				supplier	metallization	Aluminium (Al)	7429-90-5		0.432	mg	12618	98
				supplier	Passivation	Silicon Oxide	7631-86-9		0.189	mg	5520	43
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.022	mg	642	5
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.317	mg	9259	72
				supplier	back side metallization	Silver (Ag)	7440-22-4		0.112	mg	3271	25
Leadframe	M-004 Copper and its alloys	2826.184	mg	supplier	alloy	Copper (Cu)	7440-50-8		2821.522	mg	998350	636912
				supplier	alloy	Iron (Fe)	7439-89-6		1.300	mg	460	293
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		2.373	mg	840	536
				supplier	metallization	Nickel (Ni)	7440-02-0		0.915	mg	324	206
				supplier	metallization	Phosphorus (P)	7723-14-0		0.074	mg	26	17
				supplier	solder	Lead (Pb)	7439-92-1	7a-Lead in high mel	39.446	mg	954993	8904
Soft solder	Solder	41.305	mg	JIG - R	solder	Silver (Ag)	7440-22-4		1.033	mg	25009	233
				supplier	solder	Tin (Sn)	7440-31-5		0.826	mg	19998	186
				supplier	wire	Aluminium (Al)	7429-90-5		1.283	mg	997667	290
Bonding wires	M-003 Aluminum and its alloys	1.286	mg	supplier	wire	Magnesium (Mg)	7439-95-4		0.003	mg	2333	1
				supplier	compound	Silica, vitreous	60676-86-0		1320.391	mg	870000	298057
Encapsulation	M-011 Other inorganic materials	1517.691	mg	supplier	compound	Epoxy resin	25068-38-6		151.769	mg	100000	34259
				supplier	compound	Phenol resin	25690-82-2		37.942	mg	25000	8565
				supplier	compound	Carbon Black	1333-86-4		7.589	mg	5000	1713
				supplier	alloy	Tin (Sn)	7440-31-5		9.296	mg	1000000	2098
connections coating	Solder	9.296	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		9.296	mg	1000000	2098