



## 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

*\* : Required Field*

Supplier Information			
<b>Company Name *</b>	STMicroelectronics	<b>Response Date *</b>	2018-07-05
<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>	Rossana Bonaccorso	<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
STY100NM60N	TSLY*M26NB6F	A	Z8GA	2018-07-05
	Amount	UoM	Unit type	ST ECOPACK Grade
	4900	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	Comment	
Not Applicable	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
SIP	4.3-2.77-2	4	Through-hole	
Comment	TO 247 MAX			

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)

QueryList : ELV directive : 2000/53/EC amended 2016/774 _May 2016	
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 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	1.39	Die - Leadframe	283
Lead	22.24	Soft solder	4538

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	TSLY*M26NB6F					
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	83.698	mg	supplier	die	Silicon (Si)	7440-21-3		80.375	mg	960298	16403
				supplier	metallization	Aluminium (Al)	7429-90-5		1.597	mg	19081	326
				supplier	Passivation	Silicon Nitride	12033-89-5		0.380	mg	4540	78
				supplier	Passivation	Silicon Oxide	7631-86-9		0.565	mg	6750	115
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.039	mg	466	8
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.548	mg	6547	112
				supplier	back side metallization	Silver (Ag)	7440-22-4		0.194	mg	2318	40
Leadframe	Copper & its alloys	2663.980	mg	supplier	alloy	Copper (Cu)	7440-50-8		2659.610	mg	998360	542778
				supplier	alloy	Iron (Fe)	7439-89-6		1.225	mg	460	250
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		2.237	mg	840	457
				supplier	metallization	Nickel (Ni)	7440-02-0		0.840	mg	314	171
				supplier	metallization	Phosphorus (P)	12185-10-3		0.068	mg	26	14
Soft solder	Other organic materials	23.283	mg	JIG R	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	22.235	mg	954989	4538
				supplier	solder	Silver (Ag)	7440-22-4		0.583	mg	25040	119
				supplier	solder	Tin (Sn)	7440-31-5		0.465	mg	19971	94
Bonding wire	Other inorganic materials	29.325	mg	supplier	wire	Aluminium (Al)	7429-90-5		29.325	mg	1000000	5985
				supplier								
Encapsulation	Other organic materials	2091.936	mg	supplier	mold compound	Silica, vitreous	60676-86-0		1819.984	mg	870000	371425
				supplier	mold compound	Epoxy resin	25068-38-6		209.194	mg	100000	42693
				supplier	mold compound	Phenol resin	29690-82-2		52.299	mg	25000	10673
				supplier	mold compound	Carbon Black	1333-86-4		10.459	mg	5000	2134
Connections coating	Solder	7.778	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		7.778	mg	1000000	1587