



## 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>	2016-05-30
<b>Contact Name *</b>	Refer to Supplier Comment section		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
<b>Legal Statement</b>	<p>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.</p>		

Product				
Mfr Item Number	Mfr Item Name	Version	Mfr Site	Date
TYN1225RG	7AVP*25CTNL1	A	SHENZHEN B/E	2016-05-30
Amount		UoM	Unit type	ST ECOPACK Grade
1900.00		mg	Each	ECOPACK2

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles	 life.augmented	
NAC	NAC	NAC		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
NAC	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
SIP	10.2-15.5-4.5	3	THROUGH HOLE	
Comment	TO 220 NI CLIP			

QueryList : ROHS directive 2011/65/EU _ July 2011	
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
5 - Product(s) is obsolete, no information is available	false
6 - Product(s) is unknown, no information is available	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-I	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 : REACH-17th December 2015				
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						Mfr Item Name	7AVP*25CTNL1									
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)				
Die	Other inorganic materials	16.243	mg	supplier	die	Silicon (Si)	7440-21-3		14.565	mg	896700	7666				
				supplier	metallization	Nickel (Ni)	7440-02-0		0.219	mg	13482	115				
				supplier	metallization	Gold (Au)	7440-57-5		0.041	mg	2524	22				
				supplier	Passivation	Silicon Oxide	7631-86-9		0.062	mg	3817	33				
				supplier	back side metallization	Gold (Au)	7440-57-5		0.014	mg	862	7				
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.297	mg	18284	156				
				supplier	glass coating	Glass : Aluminium Oxide	1344-28-1		0.088	mg	5417	46				
				JIG - R	glass coating	Lead-Borate Glass	65997-18-4	7c-I-Electrical and e	0.957	mg	58914	504				
				Leadframe	Copper & its alloys	1253.004	mg	supplier	alloy	Copper (Cu)	7440-50-8		1251.751	mg	999000	658816
								supplier	alloy	CopperPhosphorous (CuP)	12517-41-8		1.253	mg	1000	659
Soft solder	Solder	11.787	mg	JIG - R	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	10.903	mg	925002	5738				
				supplier	solder	Silver (Ag)	7440-22-4		0.589	mg	49970	310				
				supplier	solder	Tin (Sn)	7440-31-5		0.295	mg	25028	157				
Encapsulation	Other Organic Materials	580.979	mg	supplier	mold compound	Silica, vitreous	60676-86-0		441.543	mg	759998	232391				
				supplier	mold compound	Epoxy Cresol Novolak	29690-82-2		59.260	mg	102000	31189				
				supplier	mold compound	Phenol resin	9003-35-4		34.859	mg	60000	18347				
				supplier	mold compound	Others	Proprietary		29.049	mg	50000	15289				
				supplier	mold compound	Metal hydroxide	21645-51-2		11.620	mg	20002	6116				
				supplier	mold compound	Carbon black	1333-86-4		4.648	mg	8000	2446				
Connections coating	Solder	6.362	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		6.362	mg	1000000	3348				
Clip	Copper & its alloys	31.625	mg	supplier	alloy	Copper ( Cu)	7440-50-8		31.625	mg	1000000	16645				