



Materials Declaration Form

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

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2021-06-25
Company Unique ID	NL 008751171B01		
Contact Name *	Refer to Supplier Comment section		Refer to Supplier Comment section
Contact Phone *	Refer to Supplier Comment section	Contact Email *	Refer to Supplier Comment section
Authorized Representative *	giovanni giacopello	Representative Title	ADG Material Declaration champion
Representative Phone *	Refer to Supplier Comment section	Representative Email *	Refer to Supplier Comment section
Supplier Comment	Online Technical Support - STMicroelectronics : http://www.st.com/web/en/support/support.html		

Uncertainty Statement

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Legal Statement

Supplier Acceptance *	true	Legal Declaration *	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
STGO30H60DLLFBAG	TS9X*LW65Q5F	A	998G	2021-06-25
	Amount	UoM	Unit type	ST ECOPACK Grade
	697	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
1	260	3		
Bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
Not Applicable	Tin (Sn), matte, annealed	Copper Alloy	DM00773077	

Package Designator	Package Size	Nbr of instances	Shape
Not Applicable	9.90,10.38,2.30	8	0
Comment	TO-LL		

QueryList : RoHS Directive 2011/65/EU- 8 June 2011 – Annex II amended by Delegated Directive 2015/863 - 31 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 2020/363_March 2020	
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	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 19th March 2021			
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	1.31	die - leadframe	1877
Lead	7.39	soft solder	10604

QueryList : REACH-19th January 2021				
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	7.39	Soft solder	10604
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	7.39	Soft solder	954910

QueryList : Responsible metals sourcing	
Query	Response
The component is containing at least one of the following metals : Cobalt , Gold , Tantalum , Tin , Tungsten.	true
The following metals are present in the component :	Gold, Tin,
This product is in the scope of the responsible metals sourcing, its compliance is covered by our company processes .	

Material Composition Declaration :						Mfr Item Name	TS9X* LW65Q5F					
note : Substance present with less 0.001mg will not be declared in this document												
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Dies	M-011 Other inorganic materials	8.280	mg	supplier	die	Silicon(Si)	7440-21-3		7.566	mg	913769	10856
				supplier	metallisation	Aluminium(Al)	7429-90-5		0.295	mg	35628	423
				supplier	metallisation	Gold(Au)	7440-57-5		0.005	mg	604	7
				supplier	metallisation	Nickel(Ni)	7440-02-0		0.086	mg	10386	123
				supplier	metallisation	Silver(Ag)	7440-22-4		0.025	mg	3019	36
				supplier	metallisation	Titanium(Ti)	7440-32-6		0.007	mg	845	10
				supplier	metallisation	Vanadium(V)	7440-62-2		0.005	mg	604	7
				supplier	Passivation	Silicon nitride(SiN)	12033-89-5		0.050	mg	6039	72
				supplier	passivation	Silicon oxide	7631-86-9		0.122	mg	14734	175
				supplier	polymer coating	Durimide	proprietary		0.119	mg	14372	171
Leadframe	M-004 Copper and its alloys	407.425	mg	supplier		Copper (Cu)	7440-50-8		405.673	mg	995700	582027
				supplier	alloy	Iron(Fe)	7439-89-6		0.407	mg	999	584
				supplier	metallization	Nickel (Ni)	7440-02-0		1.222	mg	2999	1753
				supplier	metallization	Phosphorus (P)	7723-14-0		0.123	mg	302	176
Soft solder	Solder	7.740	mg	SVHC	solder	Lead(Pb)	7439-92-1	7a-Lead in high melting temper	7.391	mg	954909	10604
				supplier	solder	Tin(Sn)	7440-31-5		0.155	mg	20026	222
				supplier	solder	Silver(Ag)	7440-22-4		0.194	mg	25065	278
Bonding wires	M-003 Aluminum and its alloys	0.120	mg	supplier	wire	Aluminium (Al)	7429-90-5		0.120	mg	1000000	172
				supplier	wire	Aluminium (Al)	7429-90-5		4.310	mg	1000000	6184
Encapsulation	M-011 Other inorganic materials	236.601	mg	supplier	mold compound	Silica vitreous	60676-86-0		192.712	mg	814501	276488
				supplier	mold compound	silica	7631-86-9		17.745	mg	75000	25459
				supplier	mold compound	Epoxy type resin	proprietary		17.745	mg	75000	25459
				supplier	mold compound	Phenol type resin	proprietary		7.098	mg	30000	10184
				supplier	mold compound	Carbon black	1333-86-4		1.301	mg	5499	1867
Connections coating	Solder	32.524	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		32.524	mg	1000000	46663