



## 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>	17-11-2022
<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>	Material Declaration champion	<b>Representative Title</b>	Material Declaration 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
STM32L562VET3	E51L*472XXXZ	C	9991	17-11-2022
	Amount	UoM	Unit type	ST ECOPACK Grade
	681.44	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
3	260	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
Not Applicable; if coating is used or other bulk termination	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
QFP	14x14	100	L bend	
Comment	Package : 1L LQFP 100 14x14x1.4 1 0086901			

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	TRUE
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)	FALSE
4 - Product(s) does not meet EU RoHS requirements and is not under exemptions	FALSE
Exemption Id.	Description

QueryList : REACH-10 Jun 2022				
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	E51L*472XXXZ				6000001.0	1000000.9
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Die or dies	M-011 Other inorganic materials	15.728	mg	supplier	die	Silicon (Si)	7440-21-3		15.118	mg	961216	22185
				supplier	metallization	Aluminium (Al)	7429-90-5		0.029	mg	1844	43
				supplier	metallization	Copper (Cu)	7440-50-8		0.258	mg	16404	379
				supplier	metallization	Cobalt (Co)	7440-48-4		0.001	mg	64	1
				supplier	metallization	Tantalum (Ta)	7440-25-7		0.084	mg	5341	123
				supplier	metallization	Titanium (Ti)	7440-32-6		0.003	mg	191	4
				supplier	metallization	Tungsten (W)	7440-33-7		0.002	mg	127	3
				supplier	Passivation	Silicon Nitride	12033-89-5		0.066	mg	4196	97
				supplier	Passivation	Silicon Oxide	7631-86-9		0.167	mg	10618	245
				Leadframe A25516		179.133	mg	Supplier	Leadframe	Copper	7440-50-8	
Supplier	Leadframe	Silver(Ag)	7440-22-4						4.657	mg	26000	6835
Supplier	Leadframe	Magnesium(Mg)	7439-95-4						0.358	mg	2000	526
Supplier	Leadframe	Silicon(Si)	7440-21-3						0.717	mg	4000	1051
Supplier	Leadframe	Nickel(Ni)	7440-02-0						4.478	mg	25000	6572
Glue (CRM-1076WA)		2.600	mg	Supplier	Glue or tape	Silver Powder	7440-22-4		2.183	mg	839500	3203
				Supplier	Glue or tape	Epoxy Resin A	9003-36-5		0.156	mg	60000	229
				Supplier	Glue or tape	Epoxy Resin B	Trade Secret		0.081	mg	31000	118
				Supplier	Glue or tape	Diluent A	Trade Secret		0.029	mg	11000	42
				Supplier	Glue or tape	Diluent B	Trade Secret		0.081	mg	31000	118
				Supplier	Glue or tape	Hardener	Trade Secret		0.055	mg	21000	80
				Supplier	Glue or tape	Dicyandiamide	461-58-5		0.007	mg	2500	10
Bonding wire (Au)		2.200	mg	Supplier	Glue or tape	Organic peroxide	Proprietary		0.010	mg	4000	15
				Supplier	Bonding wire	Au	7440-57-5		2.178	mg	990000	3196
				Supplier	Bonding wire	Pd	7440-05-3		0.022	mg	10000	32
Encapsulation (EME-G6315H)		460.880	mg	Supplier	Molding Compound	Epoxy Resin A	Proprietary		9.218	mg	20000	13527
				Supplier	Molding Compound	Epoxy Resin B	Proprietary		9.218	mg	20000	13527
				Supplier	Molding Compound	Phenol Resin	Proprietary		25.348	mg	55000	37198
				Supplier	Molding Compound	Carbon Black	1333-86-4		2.535	mg	5500	3720
				Supplier	Molding Compound	Silica(Amorphous) A	60676-86-0		345.430	mg	749500	506911
External Plating		20.900	mg	Supplier	Molding Compound	Silica(Amorphous) B	7631-86-9		69.132	mg	150000	101450
				Supplier	Matte Sn	Tin (Sn)	7440-31-5		20.898	mg	999900	30667
				Supplier	Matte Sn	Impurities	Proprietary		0.002	mg	100	3