



## 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>	15-09-2023
<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

**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
STM32G031F8P3 STM32G031F8P3TR	47YA*466XXXY	A	9998	15-09-2023
	Amount	UoM	Unit type	ST ECOPACK Grade
	72.00	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; if coating is used or other bulk termination	Tin (Sn), immersion	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
TSSOP	4.4x6.5	20	L bend	
Comment	Package : YA TSSOP 20 BODY 4.4 PITCH 0.65 0087225			

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	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	47YA*466XXY				7000000.0	1000013.0				
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	2.623	mg	supplier	die	Silicon (Si)	7440-21-3		2.483	mg	946626	34486				
				supplier	metallization	Aluminium (Al)	7429-90-5		0.007	mg	2669	97				
				supplier	metallization	Copper (Cu)	7440-50-8		0.059	mg	22493	819				
				supplier	metallization	Tantalum (Ta)	7440-25-7		0.019	mg	7244	264				
				supplier	metallization	Titanium (Ti)	7440-32-6		0.001	mg	381	14				
				supplier	metallization	Tungsten (W)	7440-33-7		0.001	mg	381	14				
				supplier	Passivation	Silicon Nitride	12033-89-5		0.015	mg	5719	208				
				supplier	Passivation	Silicon Oxide	7631-86-9		0.038	mg	14487	528				
				Leadframe (C194)	Copper and its alloy	27.072	mg	supplier	ALLOY	Iron (Fe)	7439-89-6		0.636	mg	23500	8836
								supplier	ALLOY	Phosphorus (P)	7723-14-0		0.008	mg	300	113
supplier	ALLOY	Zinc (Zn)	7440-66-6						0.032	mg	1200	451				
supplier	ALLOY	Copper (Cu)	7440-50-8						26.395	mg	975000	366600				
supplier	ALLOY															
Leadframe (Ag Plating)	M-011 Other inorganic materials	0.356	mg	supplier	COATING	Silver (Ag)	7440-22-4		0.356	mg	1000000	4947				
				supplier	GLUE	Silver (Ag)	7440-22-4		0.148	mg	750000	2057				
Glue (8290)	M-011 Other inorganic materials	0.198	mg	supplier	GLUE	Reaction product: bisphenol-F-(epichlorhydrin)	9003-36-5		0.014	mg	70000	192				
				supplier	GLUE	Fatty acids, C18-unsatd., dimers, polymers with	68475-94-5		0.008	mg	40000	110				
				supplier	GLUE	.gamma. Butyrolactone	96-48-0		0.008	mg	40000	110				
				supplier	GLUE	Polyoxyalkylene amine	9046-10-0		0.008	mg	40000	110				
				supplier	GLUE	Epoxy Resin	Proprietary		0.008	mg	40000	110				
				supplier	GLUE	Copper Oxide	1317-38-0		0.002	mg	10000	27				
Bonding Wire (Au (2N))	M-011 Other inorganic materials	0.410	mg	supplier	BONDING WIRE	1,4-Bis(2,3-epoxypropoxy)butane	2425-79-8		0.002	mg	10000	27				
				supplier	BONDING WIRE	Gold (Au)	7440-57-5		0.406	mg	990000	5635				
				supplier	BONDING WIRE	Others	Proprietary		0.004	mg	10000	57				
				supplier	BONDING WIRE											
Encapsulation (G700L Type S)	M-011 Other inorganic materials	40.295	mg	supplier	MOLDING COMPOUND	Epoxy Resin	Proprietary		2.901	mg	72000	40295				
				supplier	MOLDING COMPOUND	Phenol Resin	205830-20-2		1.692	mg	42000	23506				
				supplier	MOLDING COMPOUND	Silica Amorphous A	60676-86-0		32.518	mg	807000	451643				
				supplier	MOLDING COMPOUND	Silica Amorphous B	7631-86-9		3.022	mg	75000	41974				
				supplier	MOLDING COMPOUND	Carbon Black	1333-86-4		0.161	mg	4000	2239				
External Plating (Matte Sn)	M-011 Other inorganic materials	1.047	mg	supplier	COATING	Tin (Sn)	7440-31-5		1.047	mg	1000000	14544				