



## Materials Declaration Form

<b>IPC</b>	<b>1752</b>	<b>Version</b>	<b>2</b>
<b>Form Type *</b>	<b>Distribute</b>		
<b>Sectionals *</b>	<b>Material Info</b>	<b>Subsectionals *</b>	<b>A-D</b>
	<b>Manufacturing Info</b>		


Supplier Information			
<b>Company Name *</b>	<b>STMicroelectronics</b>	<b>Response Date *</b>	<b>2021-01-09</b>
<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>	<b>Material Declaration champion</b>	<b>Representative Title</b>	<b>Material Declaration champion</b>
<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>	<b>true</b>	<b>Legal Declaration *</b>	<b>Standard</b>
<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 omprehensive 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
STM32G431C8U3	74MI*468XXXX	A	998Z	2021-01-09
Amount		UoM	Unit type	ST ECOPACK Grade
100.83		mg	Each	ECOPACK® 2

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 : add in comments	Tin (Sn), immersion	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
QFN	7x7x0.55	48	flat	
Comment	Package : A0B9 UFQFPN 7X7X0.55 48L 0.5 MM PITCH 8202210			

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
5 - Product(s) is obsolete, no information is available	FALSE
6 - Product(s) is unknown, no information is available	FALSE
Exemption Id.	Description

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				TRUE
CategoryLevel_Name	CategoryLevel_Threshold	amount in product (mg)	Application	ppm in product

Material Composition Declaration :						Mfr Item Name	74MI*468XXX				5999999.0	999970.3
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)
Die or dies	M-011 Other inorganic materials	3.487	mg	supplier	die	Silicon (Si)	7440-21-3		3.150	mg	903355	31241
				supplier	metallization	Aluminium (Al)	7429-90-5		0.016	mg	4588	159
				supplier	metallization	Copper (Cu)	7440-50-8		0.143	mg	41009	1418
				supplier	metallization	Tantalum (Ta)	7440-25-7		0.046	mg	13192	456
				supplier	metallization	Titanium (Ti)	7440-32-6		0.002	mg	574	20
				supplier	metallization	Tungsten (W)	7440-33-7		0.001	mg	287	10
				supplier	Passivation	Silicon Nitride	12033-89-5		0.036	mg	10324	357
				supplier	Passivation	Silicon Oxide	7631-86-9		0.093	mg	26670	922
Glue Epoxy_8290_Henkel	M-011 Other inorganic materials	1.187	mg	Supplier	Metals	Silver	7440-22-4		1.015	mg	855000	10065
				Supplier	Plastics/polymers	Epoxy resin 1	Trade Secret		0.024	mg	20000	235
				Supplier	Organic Compounds	Epoxy resin 2	Trade Secret		0.024	mg	20000	235
				Supplier	Organic Compounds	.gamma.-Butyrolactone	96-48-0		0.036	mg	30000	353
				Supplier	Organic Compounds	Epoxy resin 3	Trade Secret		0.024	mg	20000	235
				Supplier	Organic Compounds	Amine	Trade Secret		0.024	mg	20000	235
				Supplier	Metallic compounds	Copper oxide	1317-38-0		0.036	mg	30000	353
				Supplier	Organic Compounds	1,4-Bis(2,3-epoxypropoxy)butane	2425-79-8		0.006	mg	5000	59
Encapsulation_Eme-G770_Sumitomo	M-011 Other inorganic materials	33.313	mg	Supplier	Organic Compounds	Epoxy Resin A	Trade Secret		0.700	mg	21000	6938
				Supplier	Organic Compounds	Epoxy Resin B	Trade Secret		0.700	mg	21000	6938
				Supplier	Organic Compounds	Phenol Resin A	Trade Secret		0.700	mg	21000	6938
				Supplier	Glass	Silica(Amorphous)A	60676-86-0		26.000	mg	780450	257859
				Supplier	Glass	Silica(Amorphous)B	7631-86-9		3.842	mg	115320	38101
				Supplier	Organic Compounds	Carbon Black	1333-86-4		0.208	mg	6230	2058
				Supplier	Metallic compounds	Metal Hydroxide	Trade Secret		0.466	mg	14000	4626
				Supplier	Organic Compounds	Phenol Resin B	Trade Secret		0.700	mg	21000	6938
Gold Wire Au 3N Type_Mke	Bonding Wire	0.728	mg	Supplier	Metals	Gold	7440-57-5		0.728	mg	1000000	7218
Plating Anode_Pure Tin_Asahi	M-011 Other inorganic materials	1.078	mg	Supplier	Metals	Tin	7440-31-5		1.078	mg	1000000	10695
Leadframe_C7025+Ag_Hds	Copper & its alloys	61.032	mg	Supplier	Metals	Copper	7440-50-8		55.975	mg	917140	555149
				Supplier	Metals	Nickel	7440-02-0		1.373	mg	22500	13619
				Supplier	Metals	Silicon	7440-21-3		0.159	mg	2600	1574
				Supplier	Metals	Magnesium	7439-95-4		0.070	mg	1150	696