



## 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>	22-02-2023
<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
STM32U545CEU6	70MI*455XXXZ	A	998Z	22-02-2023
	Amount	UoM	Unit type	ST ECOPACK Grade
	102.06	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 : 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-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	70MI*455XXXZ				5943389.0	899993.6
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	7.452	mg	Supplier	die	Silicon (Si)	7440-21-3		7.056	mg	946860	69135
				Supplier	metallization	Aluminium (Al)	7429-90-5		0.044	mg	5904	431
				Supplier	metallization	Copper (Cu)	7440-50-8		0.130	mg	17445	1274
				Supplier	metallization	Nickel (Ni)	7440-02-0		0.001	mg	134	10
				Supplier	metallization	Tantalum (Ta)	7440-25-7		0.022	mg	2952	216
				Supplier	metallization	Titanium (Ti)	7440-32-6		0.006	mg	805	59
				Supplier	metallization	Tungsten (W)	7440-33-7		0.001	mg	134	10
				Supplier	Passivation	Silicon Nitride	12033-89-5		0.031	mg	4160	304
				Supplier	Passivation	Silicon Oxide	7631-86-9		0.161	mg	21605	1577
				Glue epoxy (EN4900GC-SD)	M-011 Other inorganic materials	1.379	mg	Supplier	Organic Compounds	Acrylic resin	Trade Secret	
Supplier	Organic Compounds	Polybutadiene derivative	Trade Secret						0.028	mg	20000	270
Supplier	Organic Compounds	Butadiene copolymer	Trade Secret						0.021	mg	15000	203
Supplier	Organic Compounds	Acrylate	Trade Secret						0.074	mg	54000	730
Supplier	Organic Compounds	Epoxy resin	Trade Secret						0.041	mg	30000	405
Supplier	Organic Compounds	Peroxide	Trade Secret						0.011	mg	8000	108
Supplier	Organic Compounds	Additive	Trade Secret						0.025	mg	18000	243
Mold Compound (EME-G770)	M-011 Other inorganic materials	34.670	mg	Supplier	Metals	Silver	7440-22-4		1.083	mg	785000	10607
				Supplier	Organic Compounds	Epoxy Resin A	Trade Secret		0.728	mg	21000	7134
				Supplier	Organic Compounds	Epoxy Resin B	Trade Secret		0.728	mg	21000	7134
				Supplier	Organic Compounds	Phenol Resin A	Trade Secret		0.728	mg	21000	7134
				Supplier	Glass	Silica(Amorphous)A	60676-86-0		27.058	mg	780450	265112
				Supplier	Glass	Silica(Amorphous)B	7631-86-9		3.998	mg	115320	39173
				Supplier	Organic Compounds	Carbon Black	1333-86-4		0.216	mg	6230	2116
				Supplier	Metallic compounds	Metal Hydroxide	Trade Secret		0.485	mg	14000	4756
Bonding wire (Au)	Bonding Wire	0.850	mg	Supplier	Organic Compounds	Phenol Resin B	Trade Secret		0.728	mg	21000	7134
				Supplier	Metals	Gold	7440-57-5		0.850	mg	1000000	8332
Plating anode (Pure Tin)	M-011 Other inorganic materials	1.078	mg	Supplier	Metals	Tin	7440-31-5		1.078	mg	1000000	10566
Leadframe (C7025+Ag)	Copper & its alloys	60.030	mg	Supplier	Metals	Copper	7440-50-8		55.056	mg	917140	539437
				Supplier	Metals	Nickel	7440-02-0		1.351	mg	22500	13234
				Supplier	Metals	Silicon	7440-21-3		0.156	mg	2600	1529
				Supplier	Metals	Magnesium	7439-95-4		0.069	mg	1150	676