



## 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>	2012-12-11
<b>Contact Name *</b>	Refer to "Supplier Comment" section	<b>Contact Title</b>	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>	Giovanni Giacopello	<b>Representative Title</b>	AMS & IPD Materials 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/internet/com/support/online_tech_support.jsp">http://www.st.com/internet/com/support/online_tech_support.jsp</a>		

**Uncertainty Statement**

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**Legal Statement**

<b>Supplier Acceptance *</b>	true	<b>Legal Declaration *</b>	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
ST1S03PUR	MLYG*UL97AF5	A	MU1A	2012-12-11
	Amount	UoM	Unit type	ST ECOPACK Grade
	24.40	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 o	Nickel/Palladium/Gold (Ni/Pd/Au)	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
SMO	3-3-0.95	6	No lead	
Comment				

QueryList : ROHS directive 2011/65/EU _ July 2011	
Query	Response
Product(s) meets EU RoHS requirement without any exemptions	<b>true</b>
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)	<b>false</b>
Product(s) meets EU RoHS requirements by application of the selected exemption(s)	<b>false</b>
Product(s) does not meet EU RoHS requirements and is not under exemptions	<b>false</b>
Product(s) is obsolete, no information is available	<b>false</b>
Product(s) is unknown, no information is available	<b>false</b>
Exemption Id.	Description

QueryList :REACH-19 December 2012				
Query				Response
The product does not contain REACH Substances Of Very High Concern above the limits per the definition within REACH				<b>true</b>
CategoryLevel_Name	CategoryLevel_Threshold	amount in product (mg)	Application	ppm in product

Material Composition Declaration						Mfr Item Name	MLYG*UL97AF5					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
die (s)	Other inorganic materials	1.976	mg	supplier	die	Silicon (Si)	7440-21-3		1.889	mg	955972	77418
die (s)				supplier	metallization	Aluminium (Al)	7429-90-5		0.019	mg	9615	779
die (s)				supplier	metallization	Tungsten (W)	7440-33-7		0.015	mg	7591	615
die (s)				supplier	passivation	Silicon Nitride (SiN)	68034-42-4		0.004	mg	2024	164
die (s)				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.033	mg	16700	1352
die (s)				supplier	passivation	Gamma-butyrolactone	96-48-0		0.011	mg	5567	451
die (s)				supplier	passivation	Polyhydroxyamide	55295-98-2		0.005	mg	2530	205
Leadframe	Copper & its alloys	8.71	mg	supplier	alloy	Copper (Cu)	7440-50-8		8.449	mg	970034	346270
Leadframe				supplier	alloy	Iron (Fe)	7439-89-6		0.199	mg	22847	8156
Leadframe				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.012	mg	1378	492
Leadframe				supplier	alloy	Zinc (Zn)	7440-66-6		0.01	mg	1148	410
Leadframe				supplier	metallization	Nickel (Ni)	7440-02-0		0.037	mg	4248	1516
Leadframe				supplier	metallization	Palladium (Pd)	7440-05-3		0.002	mg	230	82
Leadframe				supplier	metallization	Gold (Au)	7440-57-5		0.001	mg	115	41
Die attach	Other inorganic materials	0.643	mg	supplier	glue or tape	Silver (Ag)	7440-22-4		0.44	mg	684292	18033
Die attach				supplier	glue or tape	methylene diacrylate	42594-17-2		0.161	mg	250389	6598
Die attach				supplier	glue or tape	Dicyclopentenloxyethyl methacrylate	68586-19-6		0.019	mg	29549	779
Die attach				supplier	glue or tape	Polymer of Polybutadiene + Anhydride	Proprietary		0.019	mg	29549	779
Die attach				supplier	glue or tape	Palladium (Pd)	7440-05-3		0.001	mg	1555	41
Die attach				supplier	glue or tape	Bis(α,α-dimethylbenzyl) peroxide	80-43-3		0.003	mg	4666	123
Bonding wire	Precious metal	0.271	mg	supplier	wire	Gold (Au)	7440-57-5		0.271	mg	1000000	11107
encapsulation	Other inorganic materials	12.8	mg	supplier	mold compound	Silica, vitreous	60676-86-0		11.853	mg	926016	485779
encapsulation				supplier	mold compound	epoxy resin	85954-11-6		0.512	mg	40000	20984
encapsulation				supplier	mold compound	phenol resin	26834-02-6		0.384	mg	30000	15738
encapsulation				supplier	mold compound	carbon black	1333-86-4		0.051	mg	3984	2090