



## 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>	2017-01-24
<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>	Antonella Lanzafame	<b>Representative Title</b>	AMG 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/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
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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
TS3022IST	EYE3*3022CCL	A	ZS1A	2017-01-24
Amount		UoM	Unit type	ST ECOPACK Grade
23.71		mg	Each	ECOPACK® 3

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		
1	260	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
Not Applicable ; if coating is used o	Tin (Sn), matte, annealed	Copper Alloy		



Package Designator	Size	Nbr of instances	Shape	
SOJ	3 - 3 - 0.85	8	J bend	
Comment	Package: MSOP/TSSOP 8 BODY3.00 PITCH0.65			

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)	false
Product(s) meets EU RoHS requirements by application of the selected exemption(s)	false
Product(s) does not meet EU RoHS requirements and is not under exemptions	false
Product(s) is obsolete, no information is available	false
Product(s) is unknown, no information is available	false
Exemption Id.	Description

QueryList : REACH-12th January 2017				
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	EYE3*3022CCL					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Silicon Die	Other inorganic materials	0.504	mg	supplier	Silicon Die	Silicon (Si)	7440-21-3		0.487	mg	987830	20540
Silicon Die				supplier	metallization	Aluminium (Al)	7429-90-5		0.004	mg	8114	169
Silicon Die				supplier	metallization	Titanium (Ti)	7440-32-6		0.001	mg	2028	42
Silicon Die				supplier	passivation	Titanium Nitride (TiN)	25583-20-4		0.001	mg	2028	42
Die Attach				supplier	passivation	Silicon Nitride (SiN)	68034-42-4		0.001	mg	4762	42
Die Attach				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.01	mg	47619	422
Lead-frame	Copper & its alloys	9.472	mg	supplier	alloy	Copper (Cu)	7440-50-8		9.149	mg	965899	385871
Lead-frame				supplier	alloy	Iron (Fe)	7439-89-6		0.214	mg	22593	9026
Lead-frame				supplier	alloy	Phosphorus (P)	12185-10-3		0.002	mg	211	84
Lead-frame				supplier	alloy	Zinc (Zn)	7440-66-6		0.012	mg	1267	506
Lead-frame				supplier	metallization	Silver (Ag)	7440-22-4		0.095	mg	10030	4007
Die attach	Solder	0.199	mg	supplier	glue or tape	Silver (Ag)	7440-22-4		0.137	mg	652381	5778
Die attach				supplier	glue or tape	methylene diacrylate	42594-17-2		0.05	mg	238095	2109
Die attach				supplier	glue or tape	Dicyclopentenylmethacrylate	68586-19-6		0.006	mg	28571	253
Die attach				supplier	glue or tape	Polymer of Polybutadiene + Anhydride	Proprietary		0.006	mg	28571	253
Bonding wire	Precious metals	0.296	mg	supplier	wire	Gold (Au)	7440-57-5		0.296	mg	1000000	12484
Encapsulation	Other inorganic materials	12.585	mg	supplier	molding compound	Silica, vitreous	60676-86-0		10.729	mg	852523	452509
Encapsulation				supplier	molding compound	phenolic resin	25068-38-6		0.442	mg	35121	18642
Encapsulation				supplier	molding compound	epoxy resin	29690-82-2		0.505	mg	40127	21299
Encapsulation				supplier	molding compound	Biphenyl epoxy resin	85954-11-6		0.252	mg	20024	10628
Encapsulation				supplier	molding compound	carbon black	1333-86-4		0.025	mg	1986	1054
Encapsulation				supplier	molding compound	Zinc hydroxide	20427-58-1		0.127	mg	10091	5356
Encapsulation				supplier	molding compound	Magnesium hydroxide	1309-42-8		0.505	mg	40127	21299
connections coating	Solder	0.654	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		0.654	mg	1000000	27583