



Materials Declaration Form

IPC Form Type *	1752 Distribute	Version	2
Sectionals *	Material Info Manufacturing Info	Subsectionals *	A-D <i>* : Required Field</i>

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2017-07-18
Contact Name *	Refer to "Supplier Comment" section	Contact Title	Refer to "Supplier Comment" section
Contact Phone *	Refer to "Supplier Comment" section	Contact Email *	Refer to "Supplier Comment" section
Authorized Representative *	Laurent TOSI	Representative Title	MMS MD CHAMPION
Representative Phone *	33 442 685 795	Representative Email *	laurent.tosi@st.com
Supplier Comment	Online Technical Support - STMicroelectronics : http://www.st.com/web/en/support/online_tech_support.html		

Uncertainty Statement


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Legal Statement			
Supplier Acceptance *	true	Legal Declaration *	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
M93C46-WMN6P	PHO7*0C461KA	A	3068	2017-07-18
Amount	UoM	Unit type	ST ECOPACK Grade	
80,00	mg	Each	ECOPACK® 2	

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	
NAC	Nickel/Palladium/Gold (Ni/Pd/Au)	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
SON	NAC	8	L bend	
Comment	SO 08 .15 JEDEC			

QueryList : ROHS directive 2011/65/EU _ July 2011	
Query	Response
Product(s) meets EU RoHS requirement without any exemptions	true
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-15th June 2015				
Query				Response
The product 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	PHO7*0C461KA					
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	0,511	mg	supplier	die	Silicon (Si)	7440-21-3		0,490	mg	958904	6125
die (s)				supplier	metallization	Aluminium (Al)	7429-90-5		0,002	mg	3914	25
die (s)				supplier	metallization	Copper (Cu)	7440-50-8		0,002	mg	3914	25
die (s)				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0,001	mg	1957	13
die (s)				supplier	passivation	Indium Tin oxide (In2O3.5nO2)	50926-11-9		0,016	mg	31311	200
Lead-frame	Other inorganic materials	17,694	mg	supplier	alloy	Copper (Cu)	7440-50-8		17,243	mg	974500	215538
Lead-frame				supplier	alloy	Iron (Fe)	7439-89-6		0,415	mg	23460	5189
Lead-frame				supplier	alloy	Zinc (Zn)	7440-66-6		0,021	mg	1200	265
Lead-frame				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0,015	mg	840	186
Lead-frame Coating	Other inorganic materials	0,078	mg	supplier	coating	Nickel (Ni)	7440-02-0		0,071	mg	914840	890
Lead-frame Coating				supplier	coating	Palladium (Pd)	7440-05-3		0,002	mg	29660	29
Lead-frame Coating				supplier	coating	Gold (Au)	7440-57-5		0,002	mg	27750	27
Lead-frame Coating				supplier	coating	Silver (Ag)	7440-22-4		0,002	mg	27750	27
Die Attach	Other inorganic materials	0,208	mg	supplier	glue or soft solder	Aluminium Oxide	1344-28-1		0,042	mg	200000	520
Die Attach				supplier	glue or soft solder	Bismaleimide resin	na		0,042	mg	200000	520
Die Attach				supplier	glue or soft solder	Boron nitride	10043-11-5		0,042	mg	200000	520
Die Attach				supplier	glue or soft solder	Acrylic resin	Proprietary		0,042	mg	200000	520
Die Attach				supplier	glue or soft solder	2,6-Diglycidyl phenyl allyl ether oligomer	na		0,016	mg	75000	195
Die Attach				supplier	glue or soft solder	High boiling methacrylate	Proprietary		0,005	mg	25000	65
Die Attach				supplier	glue or soft solder	Additive	Proprietary		0,010	mg	50000	130
Die Attach				supplier	glue or soft solder	Treated fumed silica	67762-90-7		0,005	mg	25000	65
Die Attach				supplier	glue or soft solder	Bis(alpha, alpha -Dimethylbenzyl) peroxide	80-43-3		0,005	mg	25000	65
Wires	Other inorganic materials	0,029	mg	supplier	Bonding wire	Copper (Cu)	7440-50-8		0,029	mg	1000000	365
Encapsulation	Other inorganic materials	61,479	mg	supplier	Moulding Compound	Epoxy Resin	na		4,612	mg	75025	57655
Encapsulation				supplier	Moulding Compound	Phenol Resin	na		3,075	mg	50016	38437
Encapsulation				supplier	Moulding Compound	Silica, vitreous	60676-86-0		53,238	mg	865956	665475
Encapsulation				supplier	Moulding Compound	Carbon-black	1333-86-4		0,307	mg	5002	3844
Encapsulation				supplier	Bismuth/Bismuth Compounds	Bismuth	7440-69-9		0,246	mg	4001	3075
Finishing	Other inorganic materials	0,001	mg	supplier	connections coating	Nickel (Ni)	7440-02-0		0,001	mg	914840	9
Finishing				supplier	connections coating	Palladium (Pd)	7440-05-3		0,000	mg	29660	0
Finishing				supplier	connections coating	Gold (Au)	7440-57-5		0,000	mg	27750	0
Finishing				supplier	connections coating	Silver (Ag)	7440-22-4		0,000	mg	27750	0