

## **Materials Declaration Form**

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

Supplier Information	Supplier Information					
Company Name *	STMicroelectronics	Response Date *	2022-06-15			
Company Unique ID	NL 008751171B01					
Contact Name *	Refer to Supplier Comment section		Refer to Supplier Comment section			
Contact Phone *	Refer to Supplier Comment section	Contact Email *	Refer to Supplier Comment section			
Authorized Representative *	Antonella Lanzafame	Representative Title	AMS Material Declaration champion			
Representative Phone *	Refer to Supplier Comment section	Representative Email *	Refer to Supplier Comment section			
Supplier Comment	Online Technical Support - STMicroelectronics :					

## **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
L6392D	KRK7*U336AD6	A	SH1A	2022-06-15
	Amount	UoM	Unit type	ST ECOPACK Grade
	130	mg	Each	ECOPACK® 2
	ECOPACK® 2 is STMicroelectronics trade nath Antimony oxide flame retardant ( in each organ		out Brominated and Chlorinated con	mpound (900ppm) and without

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		
3	260	3		
Bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	life.augmented
Not Applicable	0	Copper Alloy	1	oraagorilea

Package Designator	Package Size	Nbr of instances	Shape	
DSO	8.6 x 3.9	14	Gull wing	
Comment	K7 SO 14 .15 TO JEDEC MS-012			

QueryList : RoHS Directive 2011/65/EU-	QueryList : RoHS Directive 2011/65/EU-8 June 2011 – Annex II amended by Delegated Directive 2015/863 - 31 March 2015				
	Query				
- Product(s) meets EU RoHS requirement without any exemptions		true			
2 - Product(s) meets EU RoHS requirements	- 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)				
3 - Product(s) meets EU RoHS requirements	- Product(s) meets EU RoHS requirements by application of the selected exemption(s) false				
4 - Product(s) does not meet EU RoHS requi	rements and is not under exemptions	false			
Exemption Id.	Description				

QueryList: ELV directive: 2000/53/EC amended 2020/363_March 2020				
	Query	Response		
1 - Product(s) meets EU ELV requirements w	L - Product(s) meets EU ELV requirements without any exemptions			
2 - Product(s) meets EU RoHS requirements	2 - Product(s) meets EU RoHS requirements by application of the selected exemption(s)			
Exemption Id.	Exemption Id. Description			

QueryList : California Prop65 list, dated 25th Feb 2022				
Query	Response			
1 - The product does not contain identified substance from California Prop 65 List, no exposure to c	false			
2 - The product is containing below substance(s) from California Prop 65 List, no exposure to consu	mers is foreseen		true	
Substance	amount in product (mg)	Application	ppm in product	
Nickel	0.021	allloy	162	

	Query			Response
- Product(s) requires marking for the presence of restricted substances and must be marked with an Environmental Protection Use Period under China's leasures for Administration of the control of pollution by Electronic Information Products				
- Product(s) is eligible for marking with the e code under China's Measures for Administration of the control of pollution by Electronic Information Products				
	Н	lasardous substance		1777
Lead (Pb)	Cadmium (Cd)	lasardous substance  Mercury (Hg)	Hexavalent Chromium (Cr VI)	PBB & PBDE

QueryList: REACH-17 Jan 2022					
	Response				
1 - Product(s) does not contain REACH Subst	true				
CategoryLevel_Name	tegoryLevel_Name CategoryLevel_Threshold amount in product (mg) Application				
,	#N/A				
,	#N/A				
2 - Product(s) does not contain REACH S within REACH	ubstances Of Very High Concern in any Embedde	d article nor Homogeneous Material a	bove the limits per the definition	true	
CategoryLevel_Name	CategoryLevel_Threshold	Amount in Embedded Article / Homogeneous Material (mg)	Application - Article / Homogeneous Material	ppm in Article /Homogeneous Material	
,	#N/A		,		

QueryList : Responsible metals sourcing		
Query	Response	
The component is containing at least one of the following metals: Cobalt, Gold, Tantalum, Tin, Tungsten.	true	
The following metals are present is the component :	Gold,	
This product is in the scope of the responsible metals sourcing, its compliance is covered by our company processes .		

China GB 33372-2020 Limit standard for volatile organic compounds content in adhesives - 4 March 2020 application date 1st December 2020		
Query	Response	
The product contains adhesives identified under GB 33372	true	
All the adhesive impacted complies with GB 33372	true	

Stockholm Convention Persistent Organic Pollutants									
Query	Response								
Product is compliant with Stockholm Convention Persistent Organic Pollutants Annex I	false								

Material Composition Declaration: note: Substance present with less 0.001mg will not be declared in this document					Mfr Item Name	KRK7*U336AD6		130.0000		4999999.0	1000000.0	
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Die	M-011 Other inorganic materials	4.169	mg	supplier	die	Silicon(Si)	7440-21-3		4.072	mg	976733	31323
				supplier	metallisation	Aluminium(Al)	7429-90-5		0.006	mg	1439	46
				supplier	metallisation	Chromium(Cr)	7440-47-3		0.002	mg	480	15
				supplier	metallisation	Gold(Au)	7440-57-5		0.006	mg	1439	46
				supplier	metallisation	Nickel(Ni)	7440-02-0		0.021	mg	5037	162
				supplier	Passivation	Silicon nitride(SiN)	12033-89-5		0.026	mg	6237	200
				supplier	passivation	Silicon oxide	7631-86-9		0.036	mg	8635	277
Leadframe	M-004 Copper and its alloys	50.537	mg	supplier	alloy	Copper(Cu)	7440-50-8		49.247	mg	974474	378823
				supplier	alloy	Iron(Fe)	7439-89-6		1.158	mg	22914	8908
				supplier	alloy	Iron phosphide	1310-43-6		0.070	mg	1385	538
				supplier	alloy	Zinc(Zn)	7440-66-6		0.061	mg	1207	469
				supplier	metallization	Silver (Ag)	7440-22-4		0.001	mg	20	8
Die attach	M-011 Other inorganic materials	0.559	mg	supplier	glue	Silver(Ag)	7440-22-4	0	0.490	mg	876565	3769
				supplier	glue	Isobornyl Methacrylate	7534-94-3		0.028	mg	50089	215
				supplier	glue	Isobornyl acrylate	5888-33-5		0.028	mg	50089	215
				supplier	glue	Methyl acrylate polymer	87320-05-6		0.011	mg	19678	85
				supplier	glue	Epoxycyclohexylethyltrimethoxysilane	3388-04-3		0.001	mg	1789	8
				supplier	glue	Tert-Butyl peroxy(2-ethyl)-hexanoate	3006-82-4		0.001	mg	1789	8
Bonding wires	M-004 Copper and its alloys	0.071	mg	supplier	wire	Copper(Cu)	7440-50-8		0.071	mg	1000000	546
Encapsulation	M-011 Other inorganic materials	74.664	mg	supplier	mold compound	Silica vitreous	60676-86-0		65.479	mg	876982	503685
				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		2.987	mg	40006	22977
				supplier	mold compound	Epoxy Cresol Novolak	29690-82-2		2.987	mg	40006	22977
				supplier	mold compound	Phenol type resin	proprietary		2.240	mg	30001	17231
				supplier	mold compound	additive	proprietary		0.747	mg	10005	5746
				supplier	mold compound	Carbon black	1333-86-4		0.224	mg	3000	1723