



## Material declaration form

General Information			
IPC	1752	Version	2
Form type*	Distribute		
Sectionals*	Material information	Subsectionals*	A-D
	Manufacturing information		*: Required Field

Supplier Information			
Company name*	STMicroelectronics	Response Date*	2025-09-23
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	APMSMaterial Declaration champion
Representative phone*	Refer to Supplier Comment section	Representative email*	Refer to Supplier Comment section
Supplier comment	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**

Supplier acceptance*	true	Legal declaration*	Standard
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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	Manufacturing site	date
TSZ901IYLT	HYWY*VB4TBAY	A	Z3UA	2025-09-23
	Amount	Unit of measure	Unit type	ST ECOPACK grade
	16.38	mg	Each	ECOPACK® 3
<b>Identity</b>	<b>Authority</b>			
Comment	ECOPACK® 3 is STMicroelectronics trade name for ROHS compliant device without use of any ROHS exemption and without Halogen nor Antimony			

Manufacturing information			
J-STD-020 MSL rating	Classification temperature	Number of reflow cycles	
1	260	3	
Bulk solder termination	Terminal plating	Terminal base alloy	Comment
Not Applicable	Tin (Sn), matte, annealed	Copper Alloy	0

Package designator	Package size	Number of instances	Shape
SOT	2.9x1.6	5	gull wing
Comment			
Comment	WY SOT 23-5		

QueryList : RoHS Directive 2011/65/EU- 8 June 2011 – Annex II amended by Delegated Directive 2015/863 - 31 March 2015		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
<b>Exemption Id.</b>	<b>Description</b>	

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

QueryList : California Prop65 list, dated 3rd January 2025			Response
1 - The product does not contain identified substance from California Prop 65 List, no exposure to consumers is foreseen			false
2 - The product is containing below substance(s) from California Prop 65 List, no exposure to consumers is foreseen			true
<b>Substance</b>	<b>amount in product (mg)</b>	<b>Application</b>	<b>ppm in product</b>

QueryList :Customer		Response
QUERY		Response

QueryList : Chinese RoHS , references : SJT 11364 – 2014 and GBT 26572 – 2014				Response
QUERY				Response
1 - Product(s) requires marking for the presence of restricted substances and must be marked with an Environmental Protection Use Period under China's Measures for Administration of the control of pollution by Electronic Information Products				false
2 - 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				false
<b>Hazardous substance</b>				
<b>Lead (Pb)</b>	<b>Cadmium (Cd)</b>	<b>Mercury (Hg)</b>	<b>Hexavalent Chromium (Cr VI)</b>	<b>PBB &amp; PBDE</b>
0	0	0	0	0

QueryList : REACH-21st January 2025				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
2 - Product(s) does not contain REACH Substances Of Very High Concern in any Embedded article nor Homogeneous Material above the limits per the definition within REACH				true
CategoryLevel_Name	CategoryLevel_Threshold	Amount in embedded article / Homogeneous material (mg)	Application - article / Homogeneous material	ppm in article /Homogeneous material



QueryList : Responsible metals sourcing	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 :	<b>Gold, Tin, Tungsten,</b>

QueryList : Korea Chemical Control Act_ 27 Dec 2017 update	Response
The Product does contain at least one of the substances listed in Chemical Control Act	false

QueryList : China GB 33372-2020 Limit standard for volatile organic compounds content in adhesives - 4 March 2020 application date 1st December 2020	Response
The product contains adhesives identified under GB 33372	false

QueryList:Stockholm Convention Persistent Organic Pollutants (POP)	Response
Product is compliant with Annex A, B and C of Stockholm Convention Persistent Organic Pollutants	true

QueryList: EU Ship Recycling Regulation No. 1257/2013	Response
Product contains hazardous materials listed in Annex II of EU Ship Recycling Regulation No.1257/2013 and 2009/16/EC Directive	False

PFAS/PTFE Declaration	Response
The product is containing at least one of the following PFAS substance: Polytetrafluoroethylene,Thiophenium, Triphenylsulfonium nonaflate, Trifluoroacetic anhydride	False

BPA Declaration	Response
Product does not contain Bisphenol A (Isopropylidenediphenol)	True

Montreal Protocol	Response
Product does not contain Ozone Depleting Substances based on Annex I to Annex VII of EU REGULATION (EC) No 1005/2009	True

Environmental Protection Agency:Toxic Substances Control Act (TSCA). Section 6(h)	Response
Product does not contain Phenol, isopropylated, phosphate (3:1)	True



Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	HYWY*VB4TBAY			16.3790		4999860.0	999938.0
Homogeneous material	Material group	Mass	Unit of measure	Level	Substance category	Substance	CAS	Exempt	Mass	Unit of measure	Concentration in homogeneous material (ppm)	Concentration in product (ppm)	
Die	M-011 Other inorganic materials	0.554	mg	supplier	die	Silicon(Si)	7440-21-3		0.522	mg	942238	31868	
				supplier	metallisation	Aluminium(Al)	7429-90-5		0.006	mg	10830	366	
				supplier	metallisation	Titanium(Ti)	7440-32-6		0.001	mg	1805	61	
				supplier	metallisation	Tungsten(W)	7440-33-7		0.001	mg	1805	61	
				supplier	Passivation	Silicon nitride(S	12033-89-5		0.002	mg	3610	122	
				supplier	passivation	Silicon oxide	7631-86-9		0.013	mg	23466	794	
				supplier	polymer coating	polyimide	proprietary		0.009	mg	16245	549	
Leadframe	M-004 Copper and its alloys	7.200	mg	supplier	alloy	Copper	7440-50-8		6.916	mg	960556	422222	
				supplier	alloy	Phosphorus	7723-14-0		0.006	mg	833	366	
				supplier	alloy	Zinc	7440-66-6		0.009	mg	1250	549	
				supplier	alloy	Iron	7439-89-6		0.169	mg	23472	10317	
				supplier	alloy	Nickel plating	7440-02-0		0.091	mg	12639	5556	
				supplier	alloy	Palladium	7440-05-3		0.007	mg	972	427	
				supplier	alloy	Gold	7440-57-5		0.001	mg	139	61	
Die attach	M-011 Other inorganic materials	0.042	mg	supplier	bump	Aluminium oxide	1344-28-1		0.023	mg	550000	1410	
				supplier	bump	Ethyl acetate	112-15-2		0.011	mg	250000	641	
				supplier	bump	Bisphenol A (ep	25068-38-6		0.003	mg	65000	167	
				supplier	bump	Dapsone	80-08-0		0.003	mg	65000	167	
				supplier	bump	Silane, dichloro	68611-44-9		0.003	mg	65000	167	
				supplier	bump	Aminopropyltrie	919-30-2		0.0002	mg	5000	13	
Bonding wires	M-008 Precious metals	0.168	mg	supplier	wire	Gold	7440-57-5		0.166	mg	988500	10138	
				supplier	wire	Palladium	7440-05-3		0.002	mg	11500	118	
Encapsulation	M-011 Other inorganic materials	8.416	mg	supplier	mold compound	Proprietary			0.082	mg	9696	4982	
				supplier	mold compound	Solid Epoxy Res	Proprietary		0.082	mg	9696	4982	
				supplier	mold compound	Phenol resin	Proprietary		0.245	mg	29087	14945	
				supplier	mold compound	Amorphous Silic	60676-86-0		7.763	mg	922433	473944	
				supplier	mold compound	Carbon Black	1333-86-4		0.041	mg	4848	2491	
				supplier	mold compound	Crystalline silice	14808-60-7		0.204	mg	24240	12454	