


Product				
Mfr Item Number	Mfr Item Name	Version	Mfr Site	Date
STW65N023M9-4	TSTM*M9F9W8F	A	998G	2022-09-26
	Amount	UoM	Unit type	ST ECOPACK Grade
	6080	mg	Each	ECOPACK® 2
Comment	ECOPACK® 2 is STMicroelectronics trade name for ROHS compliant device without Brominated and Chlorinated compound (900ppm) and without Antimony oxide flame retardant (in each organic material)			

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		 life.augmented
Not Applicable	Not Applicable	.		
Bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
Not Applicable	Tin (Sn), matte, annealed	Copper Alloy	DM00761259	

Package Designator	Package Size	Nbr of instances	Shape	
SIP	15.80x21.00x5.00	4	Through-hole	
Comment	TO247-4			

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

QueryList : ELV directive : 2000/53/EC amended 2020/363_March 2020	
Query	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
Exemption id.	Description

QueryList : California Prop65 list, dated 17th Dec 2021			
Query	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		
Substance	amount in product (mg)	Application	ppm in product
Nickel	24.185	die - leadframe	3978

QueryList : Chinese RoHS , references : SJT 11364 – 2014 and GBT 26572 – 2014				
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			
Hazardous substance				
Lead (Pb)	Cadmium (Cd)	Mercury (Hg)	Hexavalent Chromium (Cr VI)	PBB & PBDE
O	O	O	O	O

QueryList : REACH-17 Jan 2022				
Query	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	
Query	Response
The component is containing at least one of the following metals : Cobalt , Gold , Tantalum , Tin , Tungsten.	true
The following metals are present in the component :	Tin,
This product is in the scope of the responsible metals sourcing, its compliance is covered by our company processes .	

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

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	false

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

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	TSTM*M9F9W8F					
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	47.815	mg	supplier	die	Silicon(Si)	7440-21-3		46.182	mg	965848	7595
				supplier	metallisation	Aluminium(Al)	7429-90-5		0.898	mg	18781	148
				supplier	metallisation	Nickel(Ni)	7440-02-0		0.272	mg	5689	45
				supplier	metallisation	Silver(Ag)	7440-22-4		0.111	mg	2321	18
				supplier	metallisation	Titanium(Ti)	7440-32-6		0.022	mg	460	4
				supplier	metallisation	Vanadium(V)	7440-62-2		0.020	mg	418	3
Leadframe	M-004 Copper and its alloys	4782.465	mg	supplier	passivation	Silicon oxide	7631-86-9		0.310	mg	6483	51
				supplier	alloy	Copper (Cu)	7440-50-8		4752.335	mg	993700	781634
				supplier	alloy	Iron(Fe)	7439-89-6		4.782	mg	1000	787
				supplier	metallization	Nickel (Ni)	7440-02-0		23.913	mg	5000	3933
				supplier	metallization	Phosphorus (P)	7723-14-0		1.435	mg	300	236
Soft solder	Solder	17.537	mg	supplier	solder	Tin(Sn)	7440-31-5		11.399	mg	649997	1875
				supplier	solder	Silver(Ag)	7440-22-4		4.984	mg	249986	721
				supplier	solder	Antimony (Sb)	7440-36-0		1.754	mg	100017	288
				supplier	wire	Aluminium (Al)	7429-90-5		12.860	mg	1000000	2115
Bonding wires 2	M-003 Aluminum and its alloys	0.804	mg	supplier	wire	Aluminium (Al)	7429-90-5		0.804	mg	1000000	132
Encapsulation	M-011 Other inorganic materials	1175.937	mg	supplier	mold compound	Silica vitreous	60676-86-0		893.712	mg	760000	146992
				supplier	mold compound	Epoxy Cresol Novolac	29690-82-2		182.270	mg	155000	29979
				supplier	mold compound	Phenolic resin	9003-35-4		35.278	mg	30000	5802
				supplier	mold compound	Metal hydroxide	proprietary		58.797	mg	50000	9671
				supplier	mold compound	Carbon black	1333-86-4		5.880	mg	5000	967
Connections coating	Solder	42.582	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		42.582	mg	1000000	7004