

Product				
Mfr Item Number	Mfr Item Name	Version	Mfr Site	Date
STM32G473VCT3 STM32G473VCT3TR	5D1L*469XXX	A	9998	21-11-2023
	Amount	UoM	Unit type	ST ECOPACK Grade
	677.85	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
3	260	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
Not Applicable ; if coating is used or other bulk termination : add in comments	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
QFP	14x14	100	L bend	
Comment	Package : 1L LQFP 100 14x14x1.4 1 0086901			

QueryList : RoHS Directive 2011/65/EU-July 2011 – Annex II amended by Directive 2015/863-April 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 : REACH-14th June 2023				
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

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	SD1L*469XXX				7000001.0	999998.2
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Die or dies	M-011 Other inorganic materials	14.923	mg	supplier	die	Silicon (Si)	7440-21-3		14.335	mg	960598	21148
				supplier	metallization	Aluminium (Al)	7429-90-5		0.028	mg	1876	41
				supplier	metallization	Copper (Cu)	7440-50-8		0.249	mg	16686	367
				supplier	metallization	Cobalt (Co)	7440-48-4		0.001	mg	67	1
				supplier	metallization	Tantalum (Ta)	7440-25-7		0.081	mg	5428	119
				supplier	metallization	Titanium (Ti)	7440-32-6		0.003	mg	201	4
				supplier	metallization	Tungsten (W)	7440-33-7		0.002	mg	134	3
				supplier	Passivation	Silicon Nitride	12033-89-5		0.063	mg	4222	93
				supplier	Passivation	Silicon Oxide	7631-86-9		0.161	mg	10789	238
				Leadfram (C194 + Ag)	Copper and its alloy	153.070	mg	supplier	ALLOY	Copper (Cu)	7440-50-8	
supplier	ALLOY	Iron (Fe)	7439-89-6						3.597	mg	23500	5307
supplier	ALLOY	Zinc (Zn)	7440-66-6						0.184	mg	1200	271
supplier	ALLOY	Metallic Phosphorus (P)	7723-14-0						0.046	mg	300	68
supplier	COATING	Silver (Ag)	7440-22-4						5.288	mg	1000000	7800
Leadframe platin (Ag)	M-011 Other inorganic materials	5.288	mg	supplier	GLUE	Silver (Ag)	7440-22-4		0.609	mg	766500	899
Glue Epoxy (3230)	M-011 Other inorganic materials	0.795	mg	supplier	GLUE	2,2'-(Methylenebis(phenyleneoxymethylene))	39817-09-9		0.060	mg	75000	88
				supplier	GLUE	Organic anhydride	26544-38-7		0.060	mg	75000	88
				supplier	GLUE	1,3-Di-2-propenyl-2-(2-propenyloxy) benzene,	Proprietary		0.024	mg	30000	35
				supplier	GLUE	Epoxide	3234-28-4		0.024	mg	30000	35
				supplier	GLUE	1,4-Bis(2,3-epoxypropoxy)butane	2425-79-8		0.014	mg	17500	21
				supplier	GLUE	Copper oxide	1317-38-0		0.001	mg	1000	1
				supplier	GLUE	Maleic anhydride	108-31-6		0.004	mg	5000	6
				supplier	BONDING WIRE	Copper (Cu)	7440-50-8		0.919	mg	964990	1355
				supplier	BONDING WIRE	Palladium (Pd)	7440-05-3		0.029	mg	30000	42
				supplier	BONDING WIRE	Silver (Ag)	7440-22-4		0.000	mg	10	0
Encapsulation (G631HQ)	M-011 Other inorganic materials	498.061	mg	supplier	BONDING WIRE	Gold (Au)	7440-57-5		0.005	mg	5000	7
				supplier	MOLDING COMPOUND	Epoxy Resin A	Proprietary		4.981	mg	10000	7348
				supplier	MOLDING COMPOUND	Epoxy Resin B	Proprietary		4.981	mg	10000	7348
				supplier	MOLDING COMPOUND	Phenol Resin	Proprietary		24.903	mg	50000	36738
				supplier	MOLDING COMPOUND	Silica(Amorphous) A	60676-86-0		408.410	mg	820000	602509
supplier	MOLDING COMPOUND	Silica(Amorphous) B	7631-86-9		49.806	mg	100000	73477				
supplier	MOLDING COMPOUND	Carbon Black	1333-86-4		4.981	mg	10000	7348				
External Plating (Sn)	M-011 Other inorganic materials	4.760	mg	supplier	EXTERNAL PLATING	Tin (Sn)	7440-31-5		4.760	mg	1000000	7023