



Product				
Mfr Item Number	Mfr Item Name	Version	Mfr Site	Date
STM32U031C8U6	70MI*459XXXA	A	998Z	22-09-2023
	Amount	UoM	Unit type	ST ECOPACK Grade
	101.56	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), immersion	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
QFN	7x7x0.55	48	flat	
Comment	Package : A0B9 UFQFPN 7X7X0.55 48L 0.5 MM PITCH 8202210			

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-10 Jun 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

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	70MI*459XXXA				6000001.0	1000003.4				
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	2.120	mg	supplier	die	Silicon (Si)	7440-21-3		1.915	mg	903302	18855				
				supplier	metallization	Aluminium (Al)	7429-90-5		0.010	mg	4717	98				
				supplier	metallization	Copper (Cu)	7440-50-8		0.087	mg	41038	857				
				supplier	metallization	Tantalum (Ta)	7440-25-7		0.028	mg	13208	276				
				supplier	metallization	Titanium (Ti)	7440-32-6		0.001	mg	472	10				
				supplier	metallization	Tungsten (W)	7440-33-7		0.001	mg	472	10				
				supplier	Passivation	Silicon Nitride	12033-89-5		0.022	mg	10377	217				
				supplier	Passivation	Silicon Oxide	7631-86-9		0.056	mg	26415	551				
				Glue Epoxy (EN4900GC)	M-011 Other inorganic materials	0.308	mg	Supplier	Organic Compounds	Acrylic resin	Proprietary		0.022	mg	70000	213
								Supplier	Organic Compounds	Polybutadiene derivative	Proprietary		0.006	mg	20000	61
Supplier	Organic Compounds	Butadiene copolymer	Proprietary						0.005	mg	15000	46				
Supplier	Organic Compounds	Acrylate	Proprietary						0.017	mg	54000	164				
Supplier	Organic Compounds	Epoxy resin	Proprietary						0.009	mg	30000	91				
Supplier	Organic Compounds	Peroxide	Proprietary						0.002	mg	8000	24				
Supplier	Organic Compounds	Additive	Proprietary						0.006	mg	18000	55				
Supplier	Metals	Silver (Ag)	7440-22-4						0.242	mg	785000	2384				
Encapsulation (EME-G770)	M-011 Other inorganic materials	36.752	mg					Supplier	Organic Compounds	Epoxy Resin A	Proprietary		0.772	mg	21000	7599
								Supplier	Organic Compounds	Epoxy Resin B	Proprietary		0.772	mg	21000	7599
				Supplier	Organic Compounds	Phenol Resin A	Proprietary		0.772	mg	21000	7599				
				Supplier	Glass	Silica(Amorphous)A	60676-86-0		28.683	mg	780450	282415				
				Supplier	Glass	Silica(Amorphous)B	7631-86-9		4.238	mg	115320	41730				
				Supplier	Organic Compounds	Carbon Black	1333-86-4		0.229	mg	6230	2254				
				Supplier	Metallic compounds	Metal Hydroxide	Proprietary		0.515	mg	14000	5066				
				Supplier	Organic Compounds	Phenol Resin B	Proprietary		0.772	mg	21000	7599				
				Bonding wire (Au)	Bonding Wire	0.306	mg	Supplier	Metals	Gold (Au)	7440-57-5		0.306	mg	1000000	3011
				Plating (Sn)	M-011 Other inorganic materials	1.078	mg	Supplier	Metals	Tin (Sn)	7440-31-5		1.078	mg	1000000	10618
Leadframe (C7025 + Ag)	Copper & its alloys	61.000	mg	Supplier	Metals	Copper (Cu)	7440-50-8		55.946	mg	917140	550837				
				Supplier	Metals	Nickel (Ni)	7440-02-0		1.373	mg	22500	13514				
				Supplier	Metals	Silicon (Si)	7440-21-3		0.159	mg	2600	1562				
				Supplier	Metals	Magnesium (Mg)	7439-95-4		0.070	mg	1150	691				
				Supplier	Metals	Silver (Ag)	7440-22-4		3.453	mg	56610	34000				