


Product				
Mfr Item Number	Mfr Item Name	Version	Mfr Site	Date
STM32F437VGT7 STM32F437VGT7TR	UF1L*419XXX5	A	959	2019-06-03
	Amount	UoM	Unit type	ST ECOPACK Grade
	681.44	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	Nickel/Palladium/Gold (Ni/Pd/Au)	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
QFP	14x14x1.4	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-27th June 2018				
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	UF1L*419XX5				6000001.0	1000002.0
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Die or dies	M-011 Other inorganic materials	23.401	mg	supplier	die	Silicon (Si)	7440-21-3		22.221	mg	949575	32609
				supplier	metallization	Aluminium (Al)	7429-90-5		0.082	mg	3504	120
				supplier	metallization	Copper (Cu)	7440-50-8		0.536	mg	22905	787
				supplier	metallization	Cobalt (Co)	7440-48-4		0.002	mg	85	3
				supplier	metallization	Tantalum (Ta)	7440-25-7		0.075	mg	3205	110
				supplier	metallization	Tungsten (W)	7440-33-7		0.241	mg	10299	354
				supplier	Passivation	Silicon Nitride	12033-89-5		0.063	mg	2692	92
				supplier	Passivation	Silicon Oxide	7631-86-9		0.181	mg	7735	266
LEADFRAME	M-011 Other inorganic materials	157.508	mg	supplier	ALLOY	Copper (Cu)	7440-50-8		147.008	mg	933337	215731
				supplier	ALLOY	Iron (Fe)	7439-89-6		3.621	mg	22989	5314
				supplier	ALLOY	Iron Phosphide (Fe2P)	1310-43-6		0.045	mg	286	66
				supplier	ALLOY	Zinc (Zn)	7440-66-6		0.181	mg	1149	266
				supplier	SPOT	Silver (Ag)	7440-22-4		6.653	mg	42239	9763
DIE ATTACH	M-011 Other inorganic materials	2.904	mg	supplier	GLUE	Silver (Ag)	7440-22-4		2.483	mg	855000	3644
				supplier	GLUE	Dodecyl acrylate	2156-97-0		0.073	mg	25000	107
				supplier	GLUE	methylene diacrylate	42594-17-2		0.232	mg	80000	341
				supplier	GLUE	Diglycidylphenyl glycidyl ether	13561-08-5		0.058	mg	20000	85
				supplier	GLUE	Isobornyl Methacrylate	7534-94-3		0.029	mg	10000	43
BONDING WIRE	M-011 Other inorganic materials	1.534	mg	supplier	BONDING WIRE	dimethylbenzyl peroxide	80-43-3		0.029	mg	10000	43
				supplier	BONDING WIRE	Silver (Ag)	7440-22-4		1.480	mg	965000	2172
				supplier	BONDING WIRE	Gold (Au)	7440-57-5		0.008	mg	5000	11
ENCAPSULATION	M-011 Other inorganic materials	490.636	mg	supplier	BONDING WIRE	Palladium (Pd)	7440-05-3		0.046	mg	30000	68
				supplier	MOLDING COMPOUND	Silica, vitreous	60676-86-0		423.256	mg	862568	621120
				supplier	MOLDING COMPOUND	Epoxy Resin	Proprietary		37.158	mg	75790	54529
				supplier	MOLDING COMPOUND	Phenol Resin	Proprietary		24.772	mg	50526	36353
				supplier	MOLDING COMPOUND	3-Mercaptopropyl trimethoxysilane	4420-74-0		2.477	mg	5053	3635
				supplier	MOLDING COMPOUND	Quartz	14808-60-7		1.486	mg	3032	2181
				supplier	MOLDING COMPOUND	Carbon black	1333-86-4		1.486	mg	3032	2181
FINISHING	M-011 Other inorganic materials	5.457	mg	supplier	COATING	Tin (Sn)	7440-31-5		5.457	mg	1000000	8008