

Materials Composition Declaration

Substance present with less 0.001mg will not be declared in this document

Part Number	Package description	Product weight (mg)	Moisture Sensitivity Level (J-STD-020)	Environmental Compliance Info				
BOS1921CQ BOS1931CQ	QFN 24L 4.0mm x 4.0mm	28,619	3	Quality – Boréas Technologies (boreas.ca)				
Homogeneous material	Substance (Mfr Item Name)	CAS	Material group	Mass (mg)	Concentration in homogeneous material		Concentration in product	
					(%)	(ppm)	(%)	(ppm)
Die	Silicon(Si)	7440-21-3	Other inorganic materials	1,255	98%	979703	4%	43858
	Aluminium(Al)	7429-90-5	Non-ferrous metals and alloys	0,013	1%	10193	0%	456
	Phosphorus(P)	7723-14-0	Other inorganic materials	0,001	0%	619	0%	28
	Titanium(Ti)	7440-32-6	Non-ferrous metals and alloys	0,004	0%	3195	0%	143
	Tungsten(W)	7440-33-7	Other precious metals	0,008	1%	6290	0%	282
subtotal				1,281	100%	1000000	4%	44767
Leadframe	Copper(Cu)	7440-50-8	Non-ferrous metals and alloys	13,021	97%	968420	45%	454972
	Iron(Fe)	7439-89-6	Steels and ferrous materials	0,314	2%	23346	1%	10968
	Phosphorus(P)	7723-14-0	Other inorganic materials	0,004	0%	298	0%	140
	Zinc(Zn)	7440-66-6	Non-ferrous metals and alloys	0,016	0%	1192	0%	560
	Lead(Pb)	7439-92-1	Non-ferrous metals and alloys	0,003	0%	199	0%	93
subtotal	Silver(Ag)	7440-22-4	Precious metals	0,088	1%	6545	0%	3075
				13,446	100%	1000000	47%	469809
Die attach	Silver(Ag)	7440-22-4	Precious metals	0,178	77%	770000	1%	6221
	Additive 1	Proprietary	Organic materials	0,002	1%	10000	0%	81
	Additive 2	Proprietary	Organic materials	0,002	1%	10000	0%	81
	Peroxide 1	Proprietary		0,002	1%	10000	0%	81
	Peroxide 2	Proprietary		0,002	1%	10000	0%	81
	Epoxy Resin A	Proprietary	Organic materials	0,002	1%	10000	0%	81
	Acrylate	Proprietary	Organic materials	0,016	7%	70000	0%	566
	Butadiene copolymer	Proprietary	Organic materials	0,002	1%	10000	0%	81
	Polybutadiene derivative	Proprietary		0,009	4%	40000	0%	323
	Acrylic resin	Proprietary	Organic materials	0,014	6%	60000	0%	485
subtotal				0,231	100%	1000000	1%	8079
Bonding wires	Copper(Cu)	7440-50-8	Non-ferrous metals and alloys	0,097	97%	965000	0%	3402
	Palladium(Pd)	7440-05-3	Precious metals	0,003	3%	30000	0%	106
	Gold(Au)	7440-57-5	Precious metals	0,001	1%	5000	0%	18
subtotal				0,101	100%	1000000	0%	3526
Plating	TIN(Sn)	7440-31-5	Non-ferrous metals and alloys	0,278	100%	1000000	1%	9722
subtotal				0,278	100%	1000000	1%	9722
Encapsulation (Mold Compound)	Epoxy Resin B	Proprietary	Organic materials	0,398	3%	30000	1%	13923
	Epoxy Resin C	Proprietary	Organic materials	0,398	3%	30000	1%	13923
	Phenol Resin	#N/A	#N/A	0,398	3%	30000	1%	13923
	Silica (Amorphous)A	60676-86-0	Other inorganic materials	9,630	73%	725000	34%	336471
	Silica (Amorphous)B	7631-86-9	Other inorganic materials	1,992	15%	150000	7%	69615
	Metal hydroxide	Proprietary		0,398	3%	30000	1%	13923
	Carbon Black	1333-86-4	Other organic materials	0,066	1%	5000	0%	2320
subtotal				13,282	100%	1000000	46%	464098
total				28,619			100%	

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