

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				
BOS1211AQ	QFN 24L 4.0mm x 4.0mm	42.346	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	1.092	98%	980918	3%	25793
	Aluminium(Al)	7429-90-5	Non-ferrous metals and alloys	0.011	1%	9583	0%	252
	Phosphorus(P)	7723-14-0	Other inorganic materials	0.001	0%	582	0%	15
	Titanium(Ti)	7440-32-6	Non-ferrous metals and alloys	0.003	0%	3004	0%	79
	Tungsten(W)	7440-33-7	Other precious metals	0.007	1%	5914	0%	156
subtotal				1.113	100%	1000000	3%	26295
Leadframe	Copper(Cu)	7440-50-8	Non-ferrous metals and alloys	13.300	97%	969057	31%	314075
	Iron(Fe)	7439-89-6	Steels and ferrous materials	0.314	2%	22855	1%	7407
	Phosphorus(P)	7723-14-0	Other inorganic materials	0.004	0%	298	0%	97
	Zinc(Zn)	7440-66-6	Non-ferrous metals and alloys	0.020	0%	1491	0%	483
	Silver(Ag)	7440-22-4	Precious metals	0.086	1%	6299	0%	2042
subtotal				13.725	100%	1000000	32%	324104
Die attach	Silver(Ag)	7440-22-4	Precious metals	0.169	75%	750000	0%	3997
	Epoxy Resin	9003-36-5	Organic materials	0.034	15%	150000	0%	799
	Epoxy Resin A	Proprietary	Organic materials	0.017	8%	75000	0%	400
	Phenol Resin	Proprietary		0.005	2%	20000	0%	107
	Dicyandiamide	461-58-5		0.001	1%	5000	0%	27
subtotal				0.226	100%	1000000	1%	5330
Bonding wires	Copper(Cu)	7440-50-8	Non-ferrous metals and alloys	0.101	97%	965000	0%	2374
	Palladium(Pd)	7440-05-3	Precious metals	0.003	3%	30000	0%	74
	Gold(Au)	7440-57-5	Precious metals	0.001	1%	5000	0%	12
subtotal				0.104	100%	1000000	0%	2460
Plating	TIN(Sn)	7440-31-5	Non-ferrous metals and alloys	4.194	100%	1000000	10%	99029
subtotal				4.194	100%	1000000	10%	99029
Encapsulation (Mold Compound)	Epoxy Resin (A & B)	Proprietary		1.379	6%	60000	3%	32567
	Phenol Resin	Proprietary		0.690	3%	30000	2%	16284
	Silica (Amorphous)A	60676-86-0	Other inorganic materials	16.664	73%	725000	39%	393518
	Silica (Amorphous)B	7631-86-9	Other inorganic materials	3.448	15%	150000	8%	81418
	Metal hydroxide	Proprietary		0.690	3%	30000	2%	16284
	Carbon Black	1333-86-4	Other organic materials	0.115	1%	5000	0%	2714
subtotal				22.985	100%	1000000	54%	542784
total				42.346			100%	

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