

# 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	QFN 24L 4.0mm x 4.0mm	28,619	3	<i>Quality – Boréas Technologies (boreas.ca)</i>

Homogeneous material	Substance (Mfr Item Name)	CAS	Material group	Mass	Concentration in homogeneous material		Concentration in product	
				(mg)	(%)	(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
Silver(Ag)	7440-22-4	Precious metals	0,088	1%	6545	0%	3075	
subtotal				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
<b>total</b>				<b>28,619</b>			<b>100%</b>	

### Disclaimer

All information in this document is furnished for exploratory or indicative purposes only. All information in this document is believed to be accurate and reliable. However, Boréas Technologies does not give any representations or warranties as to the accuracy or completeness of such information and shall have no liability for the consequences of use of such information. Boréas Technologies may make changes to information published in this document at any time and without notice. Minor deviations may occur in the products from different manufacturing locations. This document supersedes and replaces all information supplied prior to the publication hereof. Nothing in this document may be interpreted or construed as an offer to sell products that is open for acceptance or the grant, conveyance or implication of any license under any copyrights, patents or other industrial or intellectual property rights.