Control No. K2309025-KA

Material Composition Data of Product Report

Company: Kaga Toshiba Electronics Corporation
Title: Department: Manager / Quality Assurance Section, Quality Assurance Department
Name: Kohei Nakata
Signature: K. Nakata

Product Name / Product Weight
Product Name:2SC5712(TE12L,F)
Product Weight(mg):55.9009

We hereby report the Product supplied to your Company by us, with the following Product Material Composition Data.

This report is about intentionally used substances in the Material which compose the Product.
The information provided herein is accurate as of the date that it was provided, to the best of the knowledge and belief of the above signing company (“Toshiba”). Toshiba bases such knowledge and belief on information provided by third parties, and Toshiba makes no representation or warranty as to the accuracy of such third party information. Toshiba has taken and will continue to take, reasonable steps to provide accurate information to its customers, but may not have conducted destructive testing or chemical analysis on incoming materials and chemicals. Certain Toshiba suppliers consider "material content" to be confidential information and thereby proprietary, whereby such information may not be available for release to customers. This report is intended only for the use of the company to which it is addressed and no other person or entity is entitled to rely on it.

Component	Component Weight(mg)	Part	Part Weight(mg)	CAS No	Substance Name	Content Weight(mg)	Content Rate /Component(%)	Content Rate /Part(%)	Content Rate /Product(ppm)	Purpose of Use
Chip	0.2421	Chip	0.2421	7440-21-3	Silicon	0.2225	91.904	91.904	3980	Element material
				7440-57-5	Gold	0.0196	8.096	8.096	351	Chip material
Lead frame	31.8888	Base metal	31.7013	7440-50-8	Copper	31.6601	99.283	99.870	566361	Lead frame material
				7439-89-6	Iron	0.0317	0.099	0.100	567	Lead frame material
				7723-14-0	Phosphorus	0.0095	0.030	0.030	170	Lead frame material
		Plating	0.1875	7440-22-4	Silver	0.1875	0.588	100.000	3354	Lead frame plating
Bonding wire	0.1671	Bonding wire	0.1671	7440-57-5	Gold	0.1671	100.000	100.000	2989	Electric connection
Mold resin	23.3309	Mold resin	23.3309	60676-86-0	Silica, vitreous	17.1809	73.640	73.640	307346	Bulking agent
				-	Epoxy resin	3.2663	14.000	14.000	58430	Resin material
				9003-35-4	Phenol resin	1.7498	7.500	7.500	31302	Resin material
				1309-64-4	Diantimony trioxide	0.4666	2.000	2.000	8347	Resistance to flame aid
				40039-93-8	Tetrabromobisphenol A epichlorohydrin oligomer	0.4666	2.000	2.000	8347	Flame retardant
				1333-86-4	Carbon black	0.1167	0.500	0.500	2088	Resin material
				-	Antimony compounds	0.0467	0.200	0.200	835	Resin material
				-	Bismuth compounds	0.0373	0.160	0.160	667	Resin material
Outer plating	0.2720	Outer plating	0.2720	7440-31-5	Tin	0.2652	97.500	97.500	4744	Outer plating material
				7440-22-4	Silver	0.0068	2.500	2.500	122	Outer plating material
					Total	55.9009			1000000	

*This is about the product in new production line.