

Material Declaration

Compliance Date: Mar./17/2023

RoHS Compliance: Yes

MSL: 3

Pin count /Package		48B BGA (6X8)							
Model (Part) Number		AS6C4016B-45BIN							
Package Weight (mg)		105.127							
Composed parts	Purpose	Weight (mg)	%	ppm	Material	CAS No.	Weight (mg)	Material wt% of total Mass	Material wt% of Sub part
Chip	Wafer Circuit	7.6	7.23	72,294	Silicon (Si)	7440-21-3	7.600	7.229%	100.00%
Bonding Wire	Conductivity	0.767	0.73	7,296	Gold (Au)	7440-57-5	0.767	0.730%	100.00%
Molding Compound	Chip Protection	54	51.37	513,664	Silica, vitreous (Alias : Silica(Fused))	60676-86-0 7631-86-9	48.330	45.973%	89.50%
					Epoxy resin	(Trade secret)	2.700	2.568%	5.00%
					Phenol resin	(Trade secret)	2.700	2.568%	5.00%
					Carbon Black	1333-86-4	0.270	0.257%	0.50%
Substrate	Substrate	34.41	32.73	327,318	Barium Sulfate	7727-43-7	2.478	2.357%	7.20%
					Dipropylene glycolmonomethyl ether	34590-94-8	1.321	1.257%	3.84%
					Talc containing noasbestiform fibers	14807-96-6	0.220	0.209%	0.64%
					Epoxy resin	Trade seacret	1.211	1.152%	3.52%
					Morpholine derivative	Trade seacret	0.220	0.209%	0.64%
					Naphthalene	91-20-3	0.055	0.052%	0.16%
					Cured thermosettingresin (includinginorganic filler)	Trade seacret	8.620	8.199%	25.05%
					Continuous FilamentFiber Glass	Trade seacret	5.674	5.397%	16.49%
					Bisphenol A Epoxy Resin	80-05-7	0.072	0.069%	0.21%
					Copper	7440-50-8	14.067	13.381%	40.88%
					Gold	7440-57-5	0.055	0.052%	0.16%
Nickel	7440-02-0	0.416	0.396%	1.21%					
Solder Ball	Solder	7.70	7.32	73,245	Tin (Sn)	7440-31-5	7.431	7.068%	96.50%
					Silver (Ag)	7440-22-4	0.231	0.220%	3.00%
					Copper (Cu)	7440-50-8	0.039	0.037%	0.50%
Die Attach	Die Attach	0.65	0.62	6,183	2,2-dimethyl-1,3-propanediyl bismethacrylate	1985-51-9	0.243	0.231%	37.35%
					A mixture of: 4-allyl-2,6-bis (2,3-epoxypropyl)phenol; 4-allyl-6-[3-[6-[3-[6-[3-(4-allyl-2,6-bis(2,3-epoxypropyl)phenoxy)-2-hydroxyp	(Trade secret)	0.195	0.185%	30.00%
					2-[[[2,2-bis[[[(1-oxoallyl)oxy]methyl]butoxy]methyl]-2-ethyl-1,3-propanediyl diacrylate	94108-97-1	0.163	0.155%	25.00%
					bis(4-tert-butylcyclohexyl) peroxydicarbonate	15520-11-3	0.042	0.040%	6.50%
					reaction product: bisphenol-A-(epichlorhydrin)	25068-38-6	0.007	0.007%	1.15%

