

Estimate of Amount of Lead Used in Ceramic Components Including Lead (2007)

Disclaimer

Ceramics including lead is used in a large number of applications in a large number of final products making it impossible to actually survey the amount of lead transported into the EU.

This time we introduce the result of an estimate by JEITA concerning electronic components for which production figures are relatively easy to grasp.

It should also be noticed that there is a possibility of existence of ceramic components including lead which are not mentioned here.

For this reason, it should be understood that this is an estimate restricted to a possible scope within our grasp, without ultimate figures of actual amounts transported into the EU and for which we can take responsibility.

Category	Component Name	Examples of Final Product	World Production Amount kpcs/Year *1	Amount of Lead Inclusion mg/pcs *2	Amount of Lead Used kg *3	Amount Transported into the EU kg *4
Piezoelectric Ceramics	Piezoelectric Transformer	Liquid Crystal for PCs, TV sets, etc.	78,000	900	70,200	
	Ceramic Filter	FM Radio, etc.	800,000	26	20,800	
	Ceramic Resonator (SMD)	Digital Household Appliances, PCs, etc.	1,300,000	11	14,300	
	Ceramic Resonator (with lead wire)	Household Appliances, Remote Control, Mouse, etc.	1,800,000	5	9,000	
	Piezoelectric Buzzer	Air Conditioner, Washing Machine, etc.	500,000	53	26,500	
	Piezoelectric Actuator (For OA Equipment)	OA Equipment	50,000	294	14,700	
Semiconductor	PTC Thermistor	Compressor for refrigerators	150,000	390	58,500	
Ceramics	PTC Heater	Drier, Household appliances, etc.	360,000	1,600	576,000	
	PTC Thermistor	Power supplies, Communication equipment, Lighting, Household Appliances.	420,000	50	21,000	
Dielectric Ceramics	High-voltage capacitor	Power supplies of refrigerators, copiers, TV sets, etc.	1,300,000	78	101,400	
Total					912,400	

*1 Japan Electronics and Information Technology Industries Association Estimate

*2 There are components with different shapes and masses, but we estimate the amount of lead for an average component item.

*3 Estimate values calculated as explained in *1 and *2.

*4 Calculated from the GDP of the EU (2006) (14.4 trillion dollars, 29.8% of World GDP).