



Certificate for RoHS Compliance

We hereby certify our products as confirming RoHS Directive 2011/65/EU, that is, element impurities of Hazardous Substances are less than RoHS threshold value.

Directive 2011/65/EU is updated by commission delegated Directive (EU) 2015/863 of March 31, 2015.

1. Products: TOSOH Silica Glass Materials
Grade: S, ES, SD, ED, N, NP, OP-1, OP-3

2. Hazardous Substances

Substances	Chemical Analysis Data (ppm)	Detective Lower Limit (ppm)	Analysis Method	Threshold (ppm)
Cadmium (Cd)	n.d.	2	ICP-AES	100
Mercury (Hg)	n.d.	2	ICP-AES	1000
Lead (Pb)	n.d.	2	ICP-AES	1000
Hexavalent Chromium (Cr (VI))	n.d.	8	ICP-AES	1000
Polybrominated biphenyls (PBB) as total Br	n.d.	5	GC/MS	1000
Polybrominated diphenyl Ethers (PBDE) as total Br				
Di-(2-ethylhexyl)Phthalate (DEHP)	n.d.	50	GC/MS	1000
Butyl Benzyl Phthalate (BBP)	n.d.	50	GC/MS	1000
Dibutyl Phthalate (DBP)	n.d.	50	GC/MS	1000
Di-isobutyl Phthalate (DIBP)	n.d.	50	GC/MS	1000

n.d.: not detected

DATE: Feb 14th, 2018

Approved by:

M. Katsuta

Makoto Katsuta

Manager,

Environmental, Safety & Health, and

Quality Assurance Department,

Tosoh SGM Corporation