

This is to certify that the product types listed in the enclosed table conform with the

***Directive 2002/95/EC of the European Parliament and of the Council  
of 27 January 2003  
on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS directive).***

The listed product types do not contain mercury, hexavalent chromium, polybrominated biphenyls (PBB) and polybrominated diphenyl ethers (PBDE).

But the listed products can contain lead and cadmium which is explained as follows:

Lead (Pb):

The sensor types can contain lead in form of lead oxide (PbO) which is combined with / fixed in the glass layers of the sensor element.

According to figure 5 of the annex of the directive 2002/95/EC the use of "lead in glass of... electronic components ... ." is exempted from the requirements of Article 4(1) of the directive.

Cadmium (Cd):

The sensor types can contain cadmium in form of cadmium oxide (CdO) which is combined with / fixed in the contact pads or solder pads.

If the sensor type contains cadmium oxide the quantity is less than 0.01% by weight. This quantity of 0.01% by weight is set as quantity limit of the restricted material cadmium when the EC directive 2002/95/EC was put into national legislation.

Under consideration of the explained exemptions and quantity limits for restricted materials the listed product types are in compliance with the EC directive 2002/95/EC.

The declaration is only valid for standard sensor elements. Any change of the listed product types like for example shortening of lead wires or extension with other lead material and/or housing and/or insulation and/or other changes made by Heraeus Sensor Technology GmbH and/or made by the customer itself requires a new evaluation of the final sensor type / article for compliance with the RoHS-directive.

Heraeus Sensor Technology GmbH

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Type	Wire Material	Wire Length	Remarks
C 420	AgPd	≥ 10 mm	
HL 420	PtRh	≥ 10 mm	
HDA 420	Pt	all values	
HDA 421	Pt	all values	
L 220	AgPd	≥ 7 mm	
L 410 ax	AgPd	≥ 10 mm	
L 416	AgPd	≥ 10 mm	
L 420	AgPd	≥ 10 mm	
L 540	AgPd	≥ 10 mm	
L 1020	AgPd	≥ 10 mm	
M 316	Ni	≥ 50 mm	
M 420	Ni	≥ 50 mm	
M 213	NiPt	≥ 6 mm	
M 219	NiPt	≥ 8 mm	
M 220	NiPt	≥ 10 mm	
M 222	NiPt	≥ 6 mm	
M 310	NiPt	≥ 10 mm	
M 410 ax	NiPt	≥ 10 mm	
M 416	NiPt	≥ 10 mm	
M 422	NiPt	≥ 7 mm	
M 622	NiPt	≥ 10 mm	
M 1020	NiPt	≥ 10 mm	
MH 220	AuPd	≥ 10 mm	
MH 410 ax	AuPd	≥ 10 mm	
MH 416	AuPd	≥ 10 mm	
MH 540	AuPd	≥ 10 mm	
MR 828	NiPt	≥ 7 mm	
PCB 2225	none	n/a	
PCB 2230	none	n/a	
PCB 2240	none	n/a	
SMD-A 0805/1206	none	n/a	
SMD-V 0805/1206	none	n/a	
SMD 0805/1206 FC	none	n/a	
TO92	Sn plated Cu alloy	all values	The delivery of type TO92 elements with Pb free leads will start in July 2005

Remark: The table will be added / changed due to the results of internal evaluations of Heraeus Sensor Technology GmbH