

Brussels, XXX [...](2024) XXX draft

ANNEX

ANNEX

to

Commission Delegated Directive

amending Directive 2011/65/EU of the European Parliament and of the Council as regards an exemption for lead in glass or ceramic components

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ANNEX

Annex III to Directive 2011/65/EU is amended as follows:

(1) points 7(c)-I and 7(c)-II are replaced by the following:

'7(c)-I	Electrical and electronic components containing lead in a glass or ceramic other than dielectric ceramic in capacitors, e.g. piezoelectronic devices, or in a glass or ceramic matrix compound	categories and expires
7(c)-II	Lead in dielectric ceramic in capacitors for a rated voltage of 125 V AC or 250 V DC or higher excluding applications covered by point 7(c)-I or 7(c)-IV.	Applies to all categories and expires on 31 December 2027.';

(2) the following points 7(c)-V and 7(c)-VI are added:

(2) the following points 7(c)-v and 7(c)-v1 are added.			
Electrical and electronic components containing lead in a glass or glass matrix compound that fulfils any of the following functions:	Applies to all categories and expires on 31 December 2027.		
1) for protection and electrical insulation in glass beads of high-voltage diodes and glass layers for wafers on the basis of a lead-zinc-borate or a lead- silica-borate glass body;			
2) for hermetic sealing between ceramic, metal and/or glass parts;			
3) for bonding purposes in a process parameter window for < 500 °C combined with a viscosity of 1013.3 dPas ('glass-transition temperature');			
4) for use as a resistive material such as ink, with a resistivity range from 1 ohm/square to 1 megohm/square, excluding trimmer potentiometers;			
5) for use in chemically modified glass surfaces for microchannel plates (MCPs), channel electron multipliers (CEMs) and resistive glass products (RGPs).			
Electrical and electronic components containing lead in a ceramic that fulfils any of the following functions (excluding items covered by points 7(c)-II, 7(c)-III and 7(c)-IV of this Annex as well as point 14 of Annex IV): 1) for use in piezoelectric lead zirconium titanate (PZT) ceramics; 2) for providing ceramics with a positive temperature	Applies to all categories and expires on 31 December 2027.		
	Electrical and electronic components containing lead in a glass or glass matrix compound that fulfils any of the following functions: 1) for protection and electrical insulation in glass beads of high-voltage diodes and glass layers for wafers on the basis of a lead-zinc-borate or a lead-silica-borate glass body; 2) for hermetic sealing between ceramic, metal and/or glass parts; 3) for bonding purposes in a process parameter window for < 500 °C combined with a viscosity of 1013.3 dPas ('glass-transition temperature'); 4) for use as a resistive material such as ink, with a resistivity range from 1 ohm/square to 1 megohm/square, excluding trimmer potentiometers; 5) for use in chemically modified glass surfaces for microchannel plates (MCPs), channel electron multipliers (CEMs) and resistive glass products (RGPs). Electrical and electronic components containing lead in a ceramic that fulfils any of the following functions (excluding items covered by points 7(c)-II, 7(c)-III and 7(c)-IV of this Annex as well as point 14 of Annex IV): 1) for use in piezoelectric lead zirconium titanate		

coefficient (PTC).'.	