



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**

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. piezoelectric devices, or in a glass or ceramic matrix compound	Applies to all categories and expires on 31 December 2026.
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:

‘7(c)-V	<p>Electrical and electronic components containing lead in a glass or glass matrix compound that fulfils any of the following functions:</p> <ol style="list-style-type: none">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).	Applies to all categories and expires on 31 December 2027.
7(c)-VI	<p>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):</p> <ol style="list-style-type: none">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.

	coefficient (PTC).’.	
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