For Humanity and the Environment

DRAFT of the 6th amendment to the recast of xx.xx.2025

BASIS FOR ASSESSMENT

Assessment basis for metal materials in contact with drinking water[1,2]

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[1] Notified in accordance with Directive (EU) 2015/1535 of the European Parliament and of the Council of 9 September 2015 laying down a procedure for the provision of information in the field of technical regulations and of rules on Information Society services (OJ L 241, 17/9/2015, p. 1).

[2] Notified under 2025/xxx/D

Amendments

The following amendments shall be made:

I. <u>In the Annex 'Positive List of metal materials suitable for drinking water hygiene', a new point 2.9 'Copper-zinc-magnesium alloys' and the material CuZn41Mg shall be added:</u>

2.9 Copper-zinc-magnesium alloys

2.9.1 Category boundaries

Alloy constituents (% (m/m)):

Cu	Zn	Mg
56.0-66.0 %	Rest	0.1-1.5 %

Unavoidable accompanying elements (% (m/m)):

Al	Fe	Ni	Pb
≤ 0.3 %	≤ 0.5 %	≤ 0.2 %	≤ 0.10 %

2.9.2 Reference material

Alloy constituents (% (m/m)):

Cu	Zn	Mg
57.0 % - 60.0 %	Rest	0.4 % - 0.5 %

Unavoidable accompanying elements (% (m/m)):

Al	Fe	Ni	Pb
≤ 0.1 %	≤ 0.3 %	0.15 % - 0.25 %	0.06 % - 0.10 %

Elements to be determined in comparative testing as per DIN EN 15664-1 in contact water: Lead, copper, nickel, zinc

Most critical test water:

Test water 1 and 2 in accordance with DIN EN 15664-2

2.9.3 CuZn41Mg

Designation	Product group
CuZn41Mg	B - D

Alloy constituents (% (m/m)):

Cu	Zn	Mg
57.0 % - 60.0 %	Rest	0.1 % - 0.5 %

Unavoidable accompanying elements (% (m/m)):

Al	Fe	Ni	Pb
≤ 0.1 %	≤ 0.3 %	≤ 0.2 %	≤ 0.10 %

II. In the Annex 'Positive list of metal materials suitable for drinking water hygiene', the insertion of the new point 2.9 results in the displacement of the further numbering in point 2.

III. In the Annex 'Positive list of metal materials suitable for drinking water hygiene', a new point 2.17 (new numbering resulting from the above-mentioned displacement!) is added. 'Copper-zinc-silicon alloys' and the material CC761S (CuZn16Si4-C) added:

III.17. Copper-zinc-silicon alloys

III.17.1. Category limits

Alloy constituents (% (m/m)):

Cu	Zn	Si
80.0-90.0 %	Rest	1.0 % - 5.0 %

Unavoidable accompanying elements (% (m/m)):

Al	Fe	Mn	Ni	P	Pb	Sb	Sn
≤ 0.1 %	≤ 0.2 %	≤ 0.05 %	≤ 0.1 %	≤ 0.05 %	≤ 0.1 %	≤ 0.05 %	≤ 0.3 %

2.17.2 Reference material

Alloy constituents (% (m/m)):

Cu	Zn	Si
81.0 % - 83.0 %	Rest	3.0 % - 3.75 %

Unavoidable accompanying elements (% (m/m)):

Al	Fe	Mn	Ni	P	Pb	Sb	Sn
≤ 0.1 %	≤ 0.2 %	≤ 0.04 %	0.09 % - 0.15 %	≤ 0.03 %	0.09 % - 0.15 %	0.03 % - 0.05%	≤ 0.3 %

Elements to be determined in comparative testing as per DIN EN 15664-1 in contact water: Antimony, lead, copper, nickel, zinc

Most critical test water:

Test water 1 in accordance with DIN EN 15664-2

2.17.3 Materials suitable for use in drinking water systems

2.17.3.1 CC761S (CuZn16Si4-C)

Designation	Product group
CC761S* (CuZn16Si4-C)	B - D

* further restrictions on composition (see below) compared to the standardised European composition of CC761S

Alloy constituents (% (m/m)):

Cu*	Zn	Si*
81.0 % - 83.0 %	Rest	3.0 % - 4.5 %

Unavoidable accompanying elements (% (m/m)):

Al	Fe	Mn*	Ni*	P	Pb*	Sb	Sn
≤ 0.1 %	≤ 0.2 %	≤ 0.04 %	≤ 0.1 %	≤ 0.03 %	≤ 0.1 %	≤ 0.05 %	≤ 0.3 %

Heat treatment is required for this material in order to avoid selective corrosion by reducing the β phase.

IV. In the Annex 'Positive list of metal materials suitable for drinking water hygiene', the insertion of the new point 2.17 results in the displacement of the further numberings in point 2.

V. In the Annex 'Positive list of metal materials suitable for drinking water hygiene purposes', point 2.18 (new numbering resulting from the above-mentioned displacement!) In 'Copper-zinc-silicon-phosphorus alloys', the lower category limit of Cu is changed to '58.0 % (m/m)' and the lower category limit from silicon to '0.10 % (m/m)'.

VI. In the Annex 'Positive list of metal materials suitable for drinking water hygiene', point 2.18 (new numbering resulting from the above-mentioned displacement!) In 'Copper-zinc-silicon-phosphorus alloys', the material CW728R-DW (CuZn40SiP) is added as point 2.18.3.3:

2.18.3.3 CW728R-DW (CuZn40SiP) (entry valid until 30 June 2026)

Designation	Product group
CW728R-DW (CuZn40SiP)	B - D

Alloy constituents (% (m/m)):

Cu	Zn	Si	P
58.5 % - 60.5 %	Rest	0.10 % - 0.3 %	0.10 % - 0.20 %

Unavoidable accompanying elements (% (m/m)):

Al	Fe	Mn	Ni	Pb	Sn
≤ 0.05 %	≤ 0.2 %	≤ 0.05 %	≤ 0.10 %	≤ 0.10 %	≤ 0.2 %

VII. In the Annex 'Positive list of metal materials suitable for drinking water hygiene', point 2.18 (new numbering resulting from the above-mentioned displacement!) In 'Copper-zinc-silicon-phosphorus alloys', the material CW726R-DW (CuZn36SiP) is added as point 2.18.3.4:

2.18.3.4 CW726R-DW (CuZn36SiP) (entry valid until 30 June 2026)

Designation	Product group
CW726R-DW* (CuZn36Si1P)	B - D

* further restrictions on composition (see below) compared to the standardised European composition of CW726R-DW

Alloy constituents (% (m/m)):

Cu	Zn	Si	P
60.5 % - 64.5 %	Rest	0.7-1.3 %	0.01 % - 0.10 %

Unavoidable accompanying elements (% (m/m)):

Al*	Fe	Mn*	Ni*	Pb*	Sn
≤ 0.05 %	≤ 0.2 %	≤ 0.05 %	≤ 0.05 %	≤ 0.09 %	≤ 0.2 %