

Lead-free and low-lead alloys

Copper and copper alloys are essential materials for plumbing, with a continued growing trend to reduce lead in plumbing systems. Lead-free replacement alloys maintain exceptional quality and performance without the use of lead.

Lead-free / low-lead alloys			
C69300	C89833	C90800	C95900
C87850	C89835	C90810	
C89325	C89844	C95400	
C89831	C90300	C95500	

Wieland Concast certifications














- AS9100:2016-certified quality management system
- ISO 9001:2015-certified quality management system

Industry-specific applications:

- Bearings
- Bushings
- Corrosion-resistant/pressure-tight castings
- Faucet stems
- Faucets
- Fittings/valves for potable water
- Gear blanks
- Gears
- High-speed/high-pressure bearings
- Impellers
- Marine products
- Pipe fittings
- Pumps
- Water meter cases
- Valve bodies for water



Lead-free / low-lead alloys overview

	Copper Alloy UNS No.	Cu (%)	Pb (%)	Sn (%)	Zn (%)	Fe (%)	P (%)	Ni (%) ⁴	Al (%)	Bi (%)	Mn (%)	S (%)	Sb (%)	Si (%)
Silicon Brass														
	C69300 ¹	73.00-77.00	0.02 ² -0.09	0.20	Rem.	0.10	0.04-0.15	0.10			0.10		0.10	2.70-3.40
	C87850	75.00-78.00	0.02 ² -0.09	0.30	Rem.	0.10	0.05-0.20	0.20			0.10		0.10	2.70-3.40
Bismuth Tin Bronze														
	C89325	84.00-88.00	0.10	9.00-11.00	1.00	0.15	0.10	1.00	0.005	2.70-3.70		0.08	0.50	0.005
	C89831	87.00-91.00	0.10	2.70-3.70	2.00-4.00	0.30	0.05	1.00	0.005	2.70-3.70		0.08	0.25	0.005
	C89833	86.00-91.00	0.09	4.00-6.00	2.00-6.00	0.30	0.05	1.00	0.005	1.70-2.70		0.08	0.25	0.005
	C89835	85.00-89.00	0.09	6.00-7.50	2.00-4.00	0.20	0.10	1.00	0.005	1.70-2.70		0.08	0.35	0.005
	C89844	83.00-86.00	0.20	3.00-5.00	7.00-10.00	0.30	0.05	1.00	0.005	2.00-4.00		0.08	0.25	0.005
High Tin Bronze														
	C90300	86.00-89.00 ²	0.30	7.50-9.00	3.00-5.00	0.20	1.50	1.00	0.005			0.05	0.20	0.005
	C90800	85.00-90.00 ²	0.25	11.00-13.00	0.25	0.15	0.30	0.50	0.005			0.05	0.20	0.005
	C90810	Rem. ²	0.25	11.00-13.00	0.30	0.15	0.15-0.80 ³	0.50	0.005			0.05	0.20	0.005
Aluminum Bronze														
	C95400	83.00 min				3.00-5.00		1.50	10.00-11.50		0.50			
	C95500	78.00 min				3.00-5.00		3.00-5.50	10.00-11.50		3.50			
	C95900	Rem.				3.00-5.00		0.50	12.00-13.50		1.50			

¹Lead-free brass ²Pb content is greater than 0.02%. ³In determining Cu min., Cu may be calculated as Cu + Ni.

⁴For continuous castings, P shall be 1.5% max. ⁴Ni value includes Co.

Note: Unless otherwise noted, single values represent maximums.

 Lead-Free Alloy  Low-Lead Alloy  Standard-Stocked Alloy  Other Available Alloy

Wieland Concast | 14315 State Route 113 | Wakeman, OH 44889

P 440-965-4455 | sales@concast.com | concast.com



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