

BlueBrass.com

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BlueBrass®

lead-free. machinable. conductive.

 **Aurubis**

# BlueBrass®

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Under the BlueBrass® brand name, Aurubis is developing an alloy family that excellently combines the current standards in the electrical, automotive and consumer industries in terms of machinability and cost-effectiveness with the increasing demand for lead-free products.

All alloys in the BlueBrass® family meet the requirements of the EU directives on lead-free products.

All BlueBrass® alloys are individually adapted to the customer's product and process requirements.

BlueBrass® is available as semi-finished strip and wire, as well as in rod format.

BlueBrass® is suitable for sanitary applications.



## All BlueBrass® alloys are exclusively lead-free

- » with a selectively adjusted proportion of  $\alpha$ - and  $\beta$ - phases, which are adapted to the customer's products and processes in combination with precipitation hardening.
- » with good cutting properties for machining processes such as turning, milling, drilling etc.
- » with improved technological properties, e.g. tensile strength, cold and warm formability, crimpability, torque characteristics and relaxation resistance.
- » with physical properties comparable to leaded machining brass, such as corrosion resistance and conductivity.
- » with environmentally compatible and non-toxic alloying elements which can be mixed with existing recycling circuits.

The BlueBrass® Family			
Chemical composition [by weight %]	CuZn42	CuZn42ML	CuZn37 / 39ML
	PNA 277 / 278 / 378	PNA 276 / 279 / 379	PNA 376 / 375 / 377
Cu	57.0 – 58.5	57.0 – 58.5	60.0 – 65.0
Zn	Remainder	Remainder	Remainder
Fe, Ni, Sn	< 0.5	< 0.5	< 0.5
Proportion of microalloying elements		0.05 – 0.3	0.15 – 0.3
Sonstige	< 0.1	< 0.1	< 0.1
Specification	Base alloy, VDE standard	Improved machinability	Cold forming, crimping & relaxation resistance
Conductivity [MS/m]	> 15	> 15	> 15