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Material Datasheet:
CuZn40
(CW509L)

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MACHINING / STAMPING BRASS RODS

CuZn40

**Low Lead Alloy
for both
machining
and hot
stamping rods**

CuZn40 alloy, also known as “Muntz Metal”, integrates the 4MS Composition List of accepted metallic materials to be in contact with drinking water.

It has fair characteristics for machining operations, due to its low content in lead. As for conformability, this alloy shows a fair behavior when cold formed and an excellent behavior when hot formed.

MATERIAL DESIGNATION

ASBW	International	EN	UNS	JIS	Further Restrictions**
B18	CuZn40	CW509L	C28000	C3712	4 MS Common Approach, Part B

REFERENCE CHEMICAL COMPOSITION IN % (MAIN ELEMENTS) *

Material	Cu	Pb	Ni	Fe	As	Sn	Al	Bi	Zn	Other elements
B18**	60,0	0,1	0,2	0,1	-	0,1	0,03	-	Rem.	≤ 0.2 %

* Deviations from these values may occur within the restrictions of the relevant standard specifications.

** ASBW / B18 complies with the restrictions to the chemical composition of the signed materials in the table, according to the specified in the 4 MS Common Composition List, on customer request.

FABRICATION PROPERTIES

FORMING

Machinability (CuZn39Pb3 = 100 %)	40%
Cold Workability	Fair
Hot Workability	Excellent

JOINING

Resistance Welding (Butt Welding)	Good
Inert Gas Shielded Arc Welding	Fair
Gas Welding (Most Commonly Oxyacetylene)	Good
Hard Soldering	Good
Soft Soldering	Excellent
Brazing	Good

POLISHING

Mechanical	Good
Electrolytic	Poor
Electroplating	Excellent

Rods		acc. to EN 12165		
Temper	Diameter		Hardness HB	
	from [mm]	to [mm]	min.	max.
M	all		As manufactured	
H070	8	120	70	100

FINISHING AND PACKAGING

Bar ends	Marked according to customer's specification
Bar surface	Standard machining rods: bright, stripped surface Standard stamping rods: Dark and uniform surface
Packaging	Size range up to 10 mm: The rods are packed loose in a wooden box and protected with oiled paper (net weight of approx. 500 kg). Each box is strapped with 4 steel straps to ensure material integrity during shipping. Size range > 10 mm: ASBW machining rods are supplied by standard in bundles either of approximately 1.000 kg or 500 kg. Different bundle weights are also possible upon customer's request. Each bundle is steel strapped three times on cardboard and both ends are protected with litter, to ensure the material integrity during the transportation
Identification	Adhesive label on bundle strap: <ul style="list-style-type: none"> - customer - number of customer's order - EN Standard of the material - ASBW material code and LOT number ensuring production tracking - rod length - ASBW's PO number - ASBW's Quality Approval Seal

The technical information within this datasheet is provided by ASBW without any surcharge.
The end use of this content is up to the user discretion and risk.
For further detailing on technical aspects such as material condition, machining, mechanical data, temper selection through contact to our technical personal.



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