

MATERIAL DATASHEET

ALLOY 013 (ECOMERICA)



Designation		Composition (mass as %, reference values)	
Diehl Brass Solutions	013 (ECOMERICA)	Cu	60.5
DIN EN symbol	CuZn40	Pb	< 0.2
DIN EN	CW509L	Zn	remainder
UNS	C27450		

Applications

- Stamping and coining brass with good hot formability.
- Suitable for bending, riveting, upsetting and flanging.
- Applications: hot stamped parts, fittings and lock parts.

Products and relevant standards

Rods (general purposes)	EN 12163
Rods (forging stock)	EN 12165
Profiles (general purposes)	EN 12167
Seamless, round tubes (general purposes)	EN 12449

Physical properties

Density	g/cm ³	8.4
Coefficient of linear thermal expansion: 20 – 200 °C		• 10 ⁻⁶ /K
		20.3

Processing properties

Machinability (CuZn39Pb3 = 100%)	not very suitable
Hot formability	good (650 – 760 °C)
Cold formability	moderate

Mechanical properties and hardness

- The strength properties and hardness values are specified in the relevant product standards.
- The properties depend on on the product, the condition and the dimensions.

Heat treatment

Soft annealing	450 – 600 °C
Stress relief annealing	250 – 350 °C

Corrosion resistance

Generally good resistance to neutral, alkaline and organic aqueous solutions.

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