

MATERIAL DATASHEET

**ALLOY 057 (ECOMERICA)**



Designation		Composition (mass as %, reference values)	
Diehl Brass Solutions	057 (ECOMERICA)	Cu	58.0
DIN EN symbol	CuZn42	Pb	< 0.2
DIN EN	CW510L	Zn	remainder
UNS	-		

**Application**

- Low-lead material for automated machining.
- Suitable for all types of turned parts. Very suitable for forgings.
- The alloy can be cold formed only to a limited extent.
- The alloy can be used in drinking water installations.

**Products and relevant standards**

Rods (general purposes)	EN 12163
Rods (free machining purposes)	EN 12164
Rods (forging stock)	EN 12165
Profiles (general purposes)	EN 12167
Seamless, round tubes (general purposes)	EN 12449

**Physical properties**

Density	g/cm <sup>3</sup>	8.5
Coefficient of linear thermal expansion: 20 – 200 °C		• 10 <sup>-6</sup> /K
		21.4

**Processing properties**

Machinability (CuZn39Pb3 = 100%)	moderate
Hot formability	good
Cold formability	less suitable

**Mechanical properties and hardness**

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

**Heat treatment**

Soft annealing	450 – 550 °C	1 – 2 h
Stress relief annealing	280 – 330 °C	1 – 2 h

**Corrosion resistance**

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

**Diehl Brass Solutions Stiftung & Co. KG**

Heinrich-Diehl-Str. 9 | D-90552 Röthenbach a. d. Pegnitz | Phone +49 911 5704-0 | Email: dbs-sales@diehl.com

[www.diehl.com/metall](http://www.diehl.com/metall)

This material datasheet is for general information purposes only and is not subject to any revision service. Claims may not be derived from it unless there is evidence of intent or gross negligence. The data presented does not provide a warranty that the product is of a specific quality and does not replace any expert advice or customer trials.