

MATERIAL DATASHEET
ALLOY 468 (TEC.PURE)

TEC.PURE

Designation		Composition (mass as %, reference values)	
Diehl Brass Solutions	468 (TEC.PURE)	Cu	67.0
DIN EN symbol	CuZn31Si1	Si	1.0
DIN EN	CW708R	Pb	< 0.1
UNS	C69800	Zn	remainder

Application

- Lead-free alloy with good wear resistance.
- Suitable for bearing bushings, valve guides and other sliding components.

Products and relevant standards

Rods (general purposes)	EN 12163
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	19.2
Thermal conductivity RT	W/(m · K)	71.0
Electrical conductivity	m/(Ω · mm ²)	8.9
Young's modulus	GPa	108.0

Processing properties

Machinability (CuZn39Pb3 = 100%)	moderate (Index 40)
Hot formability	moderate
Cold formability	good

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	500 – 600 °C	1 – 3 h
Stress relief annealing	200 – 380 °C	1 – 3 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

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.