

EOS CopperAlloy CuNi30

Material Data Sheet

EOS COPPERALLOY CUNI30

Excellent Corrosion Resistance in Salt Water

EOS CopperAlloy CuNi30 is a copper alloy with excellent corrosion resistance in salt water. It has good strength and ductility. CuNi30 has good ductility also in very low temperatures. Material is in accordance with UNS 96400.

MAIN CHARACTERISTICS

- ightarrow Good corrosion resistance in salt water
- \rightarrow Performance in very low temperatures
- ightarrow Stable processability

TYPICAL APPLICATIONS

- ightarrow Pumps and impellers
- \longrightarrow Marine applications

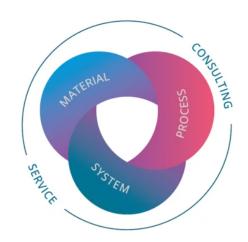
The EOS Quality Triangle

EOS uses an approach that is unique in the AM industry, taking each of the three central technical elements of the production process into account: the system, the material and the process. The data resulting from each combination is assigned a Technology Readiness Level (TRL) which makes the expected performance and production capability of the solution transparent.

EOS incorporates these TRLs into the following two categories:

- Premium products (TRL 7-9): offer highly validated data, proven capability and reproducible part properties.
- → Core products (TRL 3 and 5): enable early customer access to newest technology still under development and are therefore less mature with less data.

All of the data stated in this material data sheet is produced according to EOS Quality Management System and international standards



POWDER PROPERTIES

CuNi30 is a copper alloy according to ASTM B369-09 UNS 96400.

Powder Chemical Composition (wt.-%)

Element	Min.	Max.
Cu		Balance
Pb	-	0.01
Fe	0.25	1.5
Ni	28	32
Mn	-	1.5
Si	-	0.5
Nb	0.5	1.5
Р	-	0.02
S	-	0.02
С	-	0.15

Powder Particle Size

GENERIC PARTICLE SIZE DISTRIBUTION	15 - 63 μm

HEAT TREATMENT

Description

Optional stress relieve

Steps

Optional stress relieve at 600 $^{\circ}$ C for 2 hours. Air cooling. Stress relieve reduces ductility of material.

HEADQUARTERS

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Status as of 18.05.2024. Subject to technical modifications. EOS is certified according to ISO 9001.

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