# Copper and Copper Alloys CW505L Sheet



### **SPECIFICATIONS**

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Brasses are alloys of Copper and Zinc. They may also contain small amounts of other alloying elements to impart advantageous properties. Brasses have high corrosion resistance and high tensile strength. They are also suited to hot forging. Free machining brass sets the standard for machining, by which other metals are compared.

Brasses are divided into two classes. The alpha alloys, with less than 37% zinc, and the alpha/beta alloys with 37-45% zinc. Alpha alloys are ductile and can be cold worked. Alpha/beta or duplex alloys have limited cold ductility and are harder and stronger.

#### CHEMICAL COMPOSITION

EN 1652:1997 CW505L Brass	
Element	% Present
Copper (Cu)	69 - 71
Nickel (Ni)	0.3 max
Others (Total)	0.1 max
Tin (Sn)	0.1 max
Lead (Pb)	0.05 max
Aluminium (Al)	0.02 max
Zinc (Zn)	Balance

#### **ALLOY DESIGNATIONS**

CZ106 / CW505L corresponds to the following designation **but may not be a direct equivalent:**CuZN30

# SUPPLIED FORMS

CZ106/CW505L is typically supplied as Sheet

Sheet

# MECHANICAL PROPERTIES

EN 1652: 1997 Sheet 0.2mm to 5.0mm	
Property	Value
Proof Stress	90-430 MPa
Tensile Strength	270-480 MPa
Elongation A50 mm	50-9 %
Hardness Vickers	55 to 155 HV

Mechanical properties vary widely according to condition (soft/half hard/etc)

#### **CORROSION RESISTANCE**

#### **COLD WORKING**

This alloy has excellent cold working properties and is used for extreme deep drawing and cold working applications

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#### **CONTACT**

Please make contact directly with your local service centre, which can be found via the Address:

Locations page of our web site

Web: www.aalco.co.uk

## **REVISION HISTORY**

**Datasheet Updated** 18 July 2019

# **DISCLAIMER**

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