

Cu Al 9 Fe W/R

AWS A5.7 / A5.8: ERcAl-A2
EN ISO 24373 – S Cu 6180 (CuAl10Fe1)

Description: Wire and rods for GMAW and GTAW welding copper-aluminium, copper-silicon, copper-manganese and some copper-nickel alloys. Filler material used to weld cast irons, tool steel and galvanized sheets. Used in welding high-strength brass to guarantee a deposit of material with similar properties of the base material. Pre-heating is recommended when working with large pieces.

Application: Suitable in shipbuilding industry for pumps, propellers and valves when a high sea water corrosion resistance is required as well as in automotive industry in galvanized sheet welding and in construction industry where high mechanical properties are required.

Chemical composition according to EN ISO 24373 [%]:

	Cu	Al	Fe	Mn	Ni ¹	P	Pb	Si	Sn	Zn	As	C	Ti	S	other total
min.	rem.	8.50	-	-	-	-	-	-	-	-	-	-	-	-	-
max.	-	11.00	1.50	-	-	-	0.02	0.10	-	0.02	-	-	-	-	0.50

Remark: maximum value unless shown as a range or a minimum. ¹ including Co.

Mechanical and Physical properties: (as-welded)

min R _m [N/mm ²]	500
A [%]	35
Electric Conductivity [m/Ω·mm ²]	6.50 - 7.50
Brinell Hardness [HB 2,5/62,5]	140
T melting [°C]	1030 - 1040

Available sizes:

Wire: diam. 0.80-1.00-1.20-1.60 mm

Spools:

D100 -

D200 -

D300 15,0 kg plastic spool

BS300 15,0 kg basket spool

Drums:

200 kg

Rods: diam 1.60-2.00-2.40-3.20-4.00 mm x 1000 mm

10 kg cardboard box

Both wire and rods available in FIDAT boxes or neutral boxes

Gas: EN ISO 439 – I1 (Ar), I3 (He,Ar)

Winding: precision layer wound wire