

Data Sheet

ALUMINIUM - 1050A

Classed as being a non-heat treatable, commercially pure grade, 1050A has 99.5% aluminium content and is noted for its excellent cold formability, corrosion resistance and aesthetic qualities. Grade 1050 is the most commonly used Aluminium for general sheet metal work where strength is not essential.

The corrosion resistance of 1050 Aluminium means it can be utilised in many different atmospheres including industrial and marine environments. These factors combined with a capability for a highly polished finish, the ability to be formed easily via bending or spinning and excellent anodising and joining properties are behind its popularity in the marketplace.

Key Features:

Excellent cold forming properties
Very good anodising capability
Easily joined
High corrosion resistance
Desirable reflective aesthetic appearance

Related Specifications:

EN AW1050A	BS1470: 1050
AA1050A	A91050
UNS A91050	BS -1B / 5L36
A1050	DIN 3.0255 – Al99.5
UNI 9001/2	L-3051

Chemical Composition:

Aluminium	99.5 min
Iron	0.40 max
Silicon	0.25 max
Zinc	0.07 max
Manganese	0.05 max
Copper	0.05 max
Magnesium	0.05 max
Titanium	0.05 max

Typical Physical Properties:

Melting Point	635°C
Density	2.71 g/cm ³
Thermal conductivity	230 W/m ² K
Thermal expansion coefficient (20-200°C)	24 x 10 ⁻⁶ /°C
Electrical conductivity	61.6 % IACS
Modulus of elasticity	69 GPa
Electrical resistivity	0.0282 microhm m

Fabrication Properties:

Soldering/ Brazing	Excellent
Cold Formability	Excellent
Machinability	Poor
Oxy-acetylene welding	Excellent
Gas-shielded arc welding	Excellent
Resistance welding	Excellent

Typical Uses:

The 1050 grade is often used for general fabrication and sheet metal work, kitchenware, heat transfer components, boiler making, chemical and pharmaceutical process plant equipment, food industry vessels and containers, architectural flashings, lamp reflectors, cable sheathing and panelling.