



OHMALLOY MATERIAL CO.,LTD
SHANGHAI,CHINA

Ohmalloy142A(CommonName0Cr21Al6)

Ohmalloy142A is a iron-chromlum-aluminlum alloy (FeCrAl alloy) characterized by high resistance ,low coefficient of electric resisistance,high operating temperature,good corrosion resisistance under high temperature. It is suitable for use at temperature up to 1250°C.

Typical application for Ohmalloy142A are used in electric ceramic cooktop , industial furnace, heaters and catalytic purifier.

Normal Composition%

C	P	S	Mn	Si	Cr	Ni	Al
0.06	0.025	0.025	0.70	1.0	19.0~ 22.0	0.60	5.0~7.0

Typical Mechanical Properties(1.0mm)

Yield Strength	Tensile Strength	Elogation
Mpa	Mpa	%
520	720	20

Typical Physical Properties

Density(g/cm)	7.25
Electrical Resistivity at 20	1.3-1.4
Conductivity Coefficient at 20(WmK)	13

Coefficient of Thermal Expansion

Temperature	Coefficient of Thermal Expansion10~6/k
20°C~1000°C	15

Specific heat capacity

Temperature	20°C
J/gk	1.47
Melting Point	1500
Max continuous operating	1250

temperature in air(°C)	
Magnetic properties (°C)	Non-magnetic

Temperature Factor of Electrical Resisitivity

20°C	1
100°C	1.002
200°C	1.007
300°C	1.014
400°C	1.024
500°C	1.036
600°C	1.056
700°C	1.064
800°C	1.070
900°C	1.074
1000°C	1.078
1100°C	1.081
1200°C	1.084

Style of Supply

Alloy Name	Type	Dimension
Ohmalloy142AW	Wire	D=0.03mm~8mm
Ohmalloy142AR	Ribbon	W=0.4~40mm T=0.03~2.9mm
Ohmalloy142AS	Strip	W=8~250mm T=0.1~3.0mm
Ohmalloy142AF	Foil	W=6~120mm T=0.003~0.1mm
Ohmalloy142AB	Bar	Dia=8~100mm L=50~1000mm



Pay attention to Ohmalloy

