

TECHNICAL DATA SHEET

A1

Universal alloy for the production of items, jewels and models in aluminium obtained by investment casting and mechanical working.

TAB.1 - Mechanical data

Hardness as cast	70	HV
Hardness hardened	130	HV
Tensile strength	145	MPa
Yield strength	70	MPa
Elongation	20	%

TAB.2 - Physical data

Color	aluminium		
Colour Coordinates	L*:	87.8	
	a*:	0.41	
	b*:	4.31	
Density	2.69	g/cm ³	
Melting Range	Solidus:	570	°C
	Liquidus:	645	°C

TAB.3 - Heat treatments

Solution annealing	500 30	°C min
Recrystallization Annealing	500 30	°C min
Hardening	180 18	°C

TAB.4 - Investment casting parameters

Premelting temperature		800	°C
Casting Temperature	Min:	750	°C
	Max:	850	°C
Water investment powder ratio		36-38	%
Flask temperature	Min:	300	°C
	Max:	400	°C
Quenching time without stones in place	Min:	10	min
	Max:	20	min
Quenching time with stones in place		15	min in boiling water
Pickling	H2SO4:	15	%
	Temp:	50	°C
	Time:	50	min

TAB.5 - Mechanical working parameters

Premelting temperature		800	°C
Casting Temperature	Min:	750	°C
	Max:	850	°C
First thickness reduction	Lamination:	20	%
	Drawing:	10	%
Following thickness reductions	Lamination:	50	%
	Drawing:	25	%
Pickling after annealing	H2SO4:	15	%
	Temp:	50	°C
	Time:	15	min