

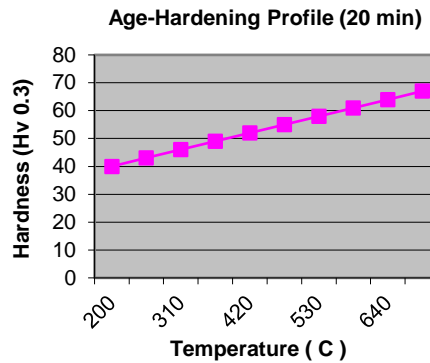
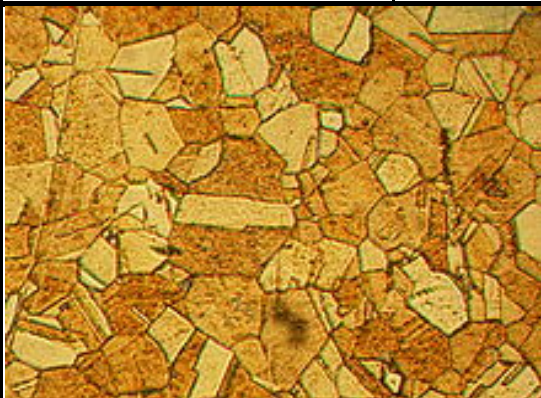


**Technical Data**

**Brass Alloy # 342**

<i>Parameters</i>	<i>Values</i>	
<b>Physical Properties</b>		
Alloy Composition	( % )	5.00 % Tin 15.00 % Zn 80.00% Cu
Grain Refiner		Silicon
	<i>Unit</i>	<i>Brass</i>
Density	(gm/cc)	8.62
Color	( Y1)	Std. Yellow
ASTM Grain Size	ASTM	8.5
<b>Temperatures</b>	<i>Unit</i>	<i>Brass</i>
Solidus	( ° C )	955
Liquidus	( ° C )	915
Casting Temperature	( ° C )	1048C-1055C
Graining Temp for re-melting	( ° C )	
<b>Mechanical Properties</b>	<i>Unit</i>	<i>Brass</i>
Tensile Strength	N/mm <sup>2</sup>	422
0.2% offset Yield Strength	N/mm <sup>2</sup>	320
Elongation ( annealed)	( % )	62
As cast hardness	( Hv )	65
Hardness after 60% reduction	( Hv )	80
Hardness after annealing	( Hv )	32
Hardness after heat-treating	( Hv )	75
		700 C for 30 min & quench
		700 C for 20 min & air cool

**Microstructure** Cold worked (60%) and annealed ( Mag: 100X)



**Recommended Application :**

**SUITABLE FOR CASTING & FABRICATION OF BRASS JEWELRY.  
POOR TARNISH RESISTANCE, GOOD HARDNESS & RE-USABILITY .**

<b>Temperature ( °C )</b>	<b>Brass</b>
200	40
255	43
310	46
365	49
420	52
475	55
530	58
585	61
640	64
695	67