


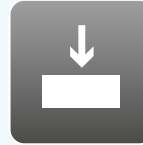


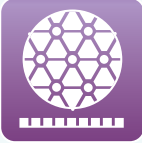


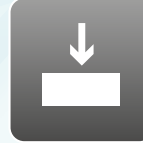

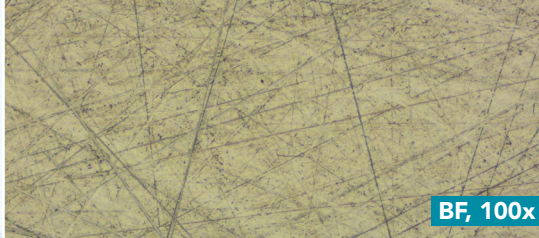



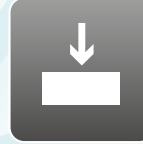

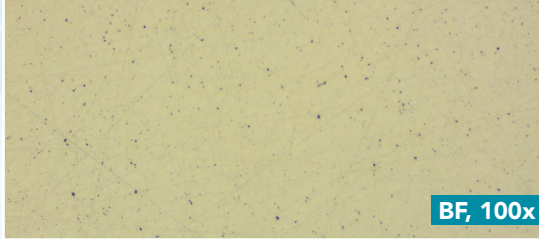





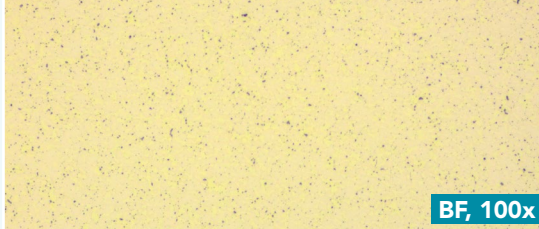


# Aka-Brief #1 Copper and Copper Alloys

1						
	Rhaco Grit P320	Water	300 rpm	20 N	Until plane	BF, 100x
2						
	Largan 9	DiaUltra 9 µm	150 rpm	30 N	3:30 min	BF, 100x
3						
	Moran-U	DiaUltra 3 µm	150 rpm	25 N	2:30 min	BF, 100x
4						
	Chemal*	Fumed Silica 0.2 µm Alkaline**	150 rpm	15 N	2:00 min	BF, 100x

Times are stated for a 300 mm preparation system and forces for an individual 40 mm dia. sample.

On a 250 mm system the times should be increased by 30%, on a 200 mm system by 100%.

With larger samples the force should be increased, with smaller samples decreased.

The rotational speed of the head (sample holder or sample mover plate) used is 150 rpm.

Time and force may vary depending on the equipment.

\* Prior to oxide polishing the polishing cloth should be wetted with water until the holder touches the polishing cloth. For the last 10 seconds of the oxide polishing step, the polishing cloth should be flushed with water to clean both sample(s) and polishing cloth.

\*\* 96 ml Fumed Silica,  
2 ml H<sub>2</sub>O<sub>2</sub> (30%),  
2 ml NH<sub>4</sub>OH (25%).

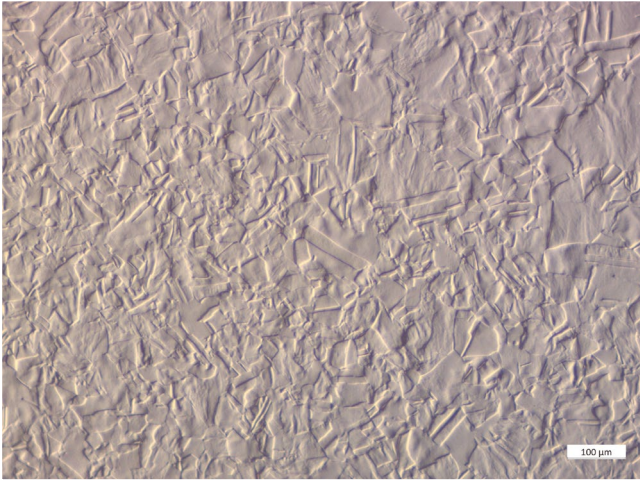
The mixture should be used fresh (within a couple of hours) and stirred regularly.

Please make sure that all necessary safety precautions are taken when handling chemicals.

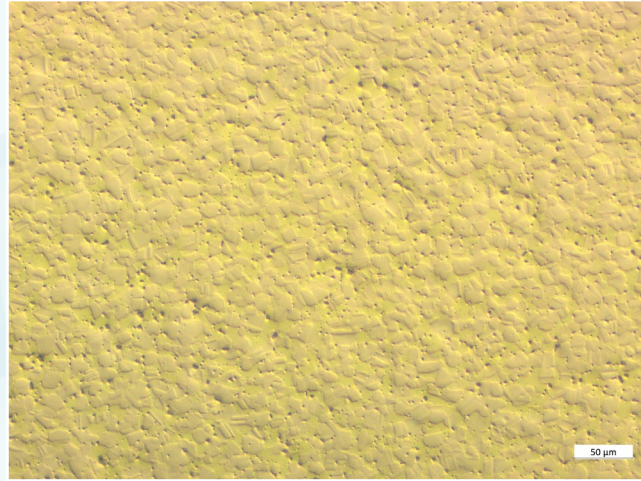


# Aka-Brief #1 Copper and Copper Alloys

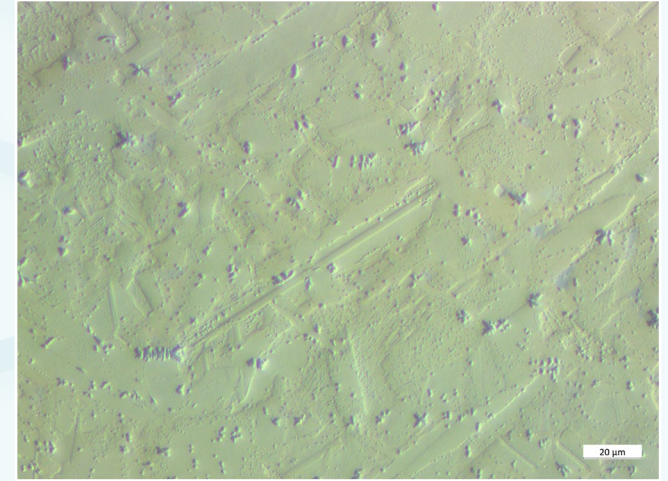
## FINAL RESULT



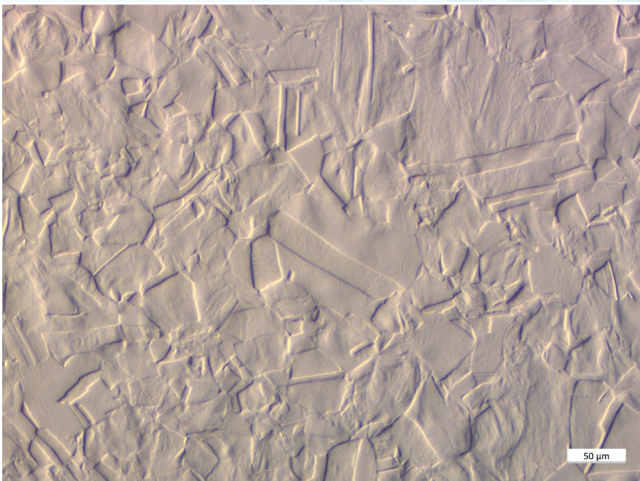
Copper, DIC, 100x



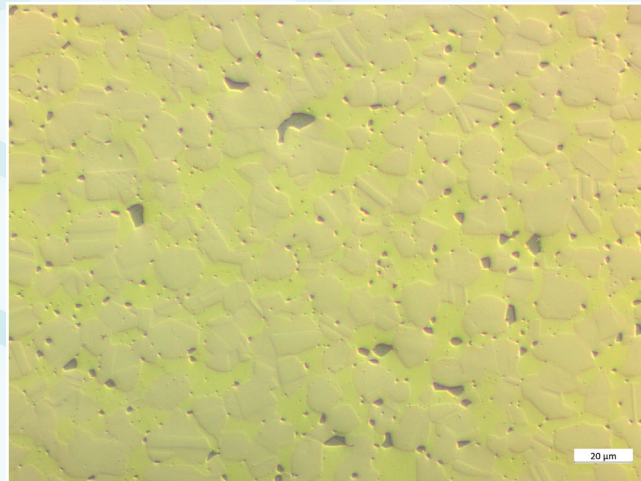
Brass, DIC, 200x



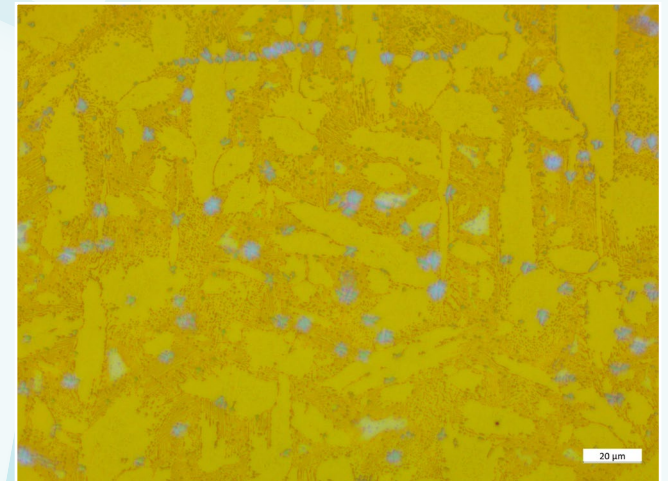
Bronze, DIC, 500x



Copper, DIC, 200x



Brass, DIC, 500x



Bronze, etched with Cu m7 (Petzow), BF, 500x