

M 336

CU ALLOY ROD

K2 34.5°C [56/01.01]

VERY CORRODED COPPER ROD CURVED INTO THE SHAPE OF A HANDLE. ONE END SHARPLY CURVED OPPOSITE TO MAIN ARC. SQUARE CROSS-SECTION.

Dimensions: 235 mm MAX LENGTH.
6 x 6 CROSS SECTION.

Mass: 128.4 g. ~~Mass (4, 5, 8, 9)~~

Non-MAGNETIC.

Sections: Roughly square cross section, casting porosity and a central star-shaped void surrounded by a blue corrosion product. One side of L section thickly coated with laminated corrosion product, some copper from dezincification. Lots of pores associated with the corroded areas and the copper (27, 28). Corrosion consists mainly of laminated cuprite with some malachite in spots (29). Extensive dezincification around voids (30). The inclusions are fairly messy structures consisting of dark strongly reticulate with polishing relief, often associated with dark blue inclusions, some of these themselves 2-phase (31-36). Some are almost circular, slightly pinkish. Dark blue crystals are angular (some and yellow internal reflections), $< 10 \mu$. Angular copper grains surrounded by cuprite in areas of dezincification (33). The blue inclusions with light reflections in X polarized light are a bit lighter than the opaque ones. Reticulae vary in size up to 20μ , ovoid, rounded, elongated, granular interiors. Blue inclusions are harder. Etched (FeCl_3) metal - recrystallized, angular, annealing twins, single phase, ASTM 4 (some residual quenching damage). Inclusions attacked by the etchant - re-polish for SEM (4, 5, 8, 9).