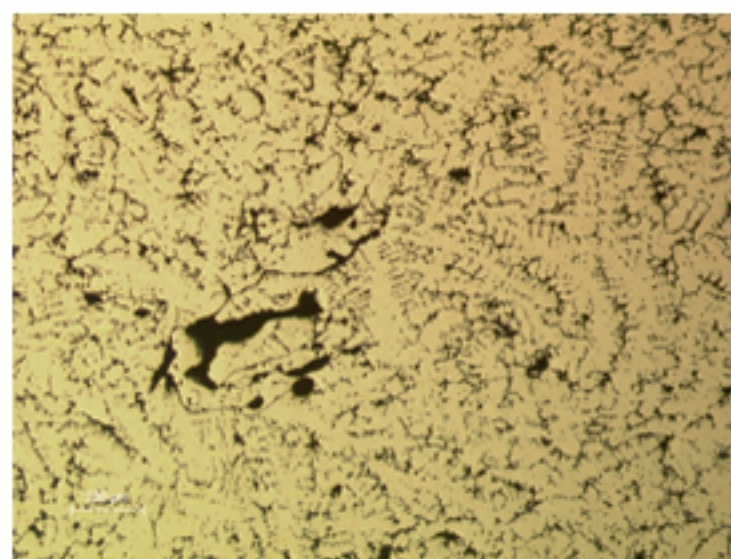


A58 - PTOLOMAIC COIN



A58.1

Identification

Sample: A58 (A59)

Card reference: S87

Origin: Egypt

Location: Collection AFL

Description

The coin was sectioned for metallographic study. Cast tin bronze (less than 10%wt), showing dendritic structure. Presence of holes in the interior and very superficial corrosion.

Figure captions

A58.1

General view: well defined dendritic structure, second phase and impurities in the interdendritic space, shrinkage cavities and a large number of pores.

A58.2

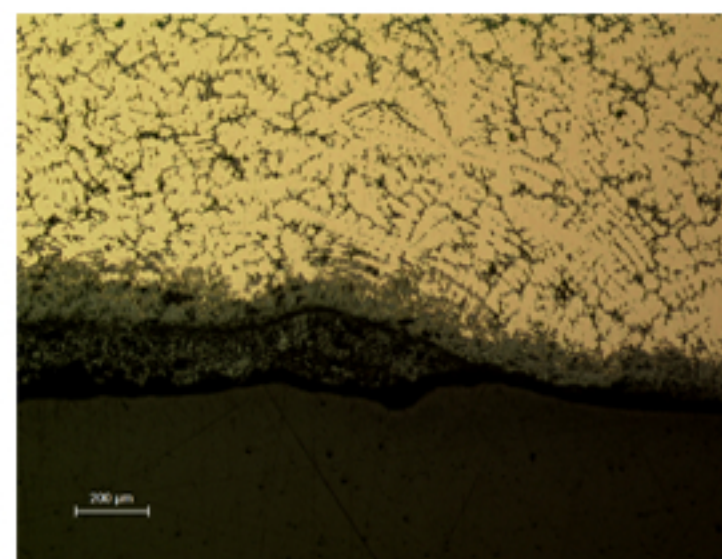
General view: slight deformation of dendrites near the surface and selective corrosion of the Cu-rich phase of the alloy.

A58.3

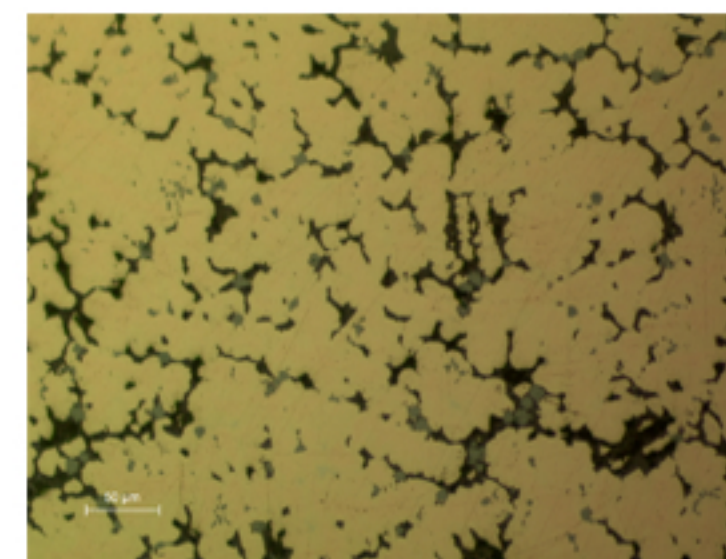
Detail: interdendritic space presenting corroded eutectoid phase (dark grey), pores (black) and sulphide inclusions (grey).

A58.4

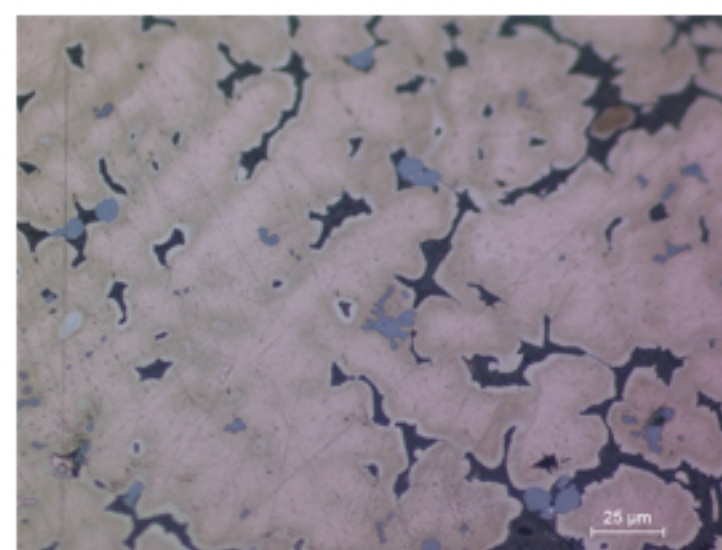
Detail: cored dendrites (rose coloured in the middle); eutectoid (Sn-rich phase) and impurities (containing S) are visible in interdendritic space (etchant: aqueous FeCl_3).



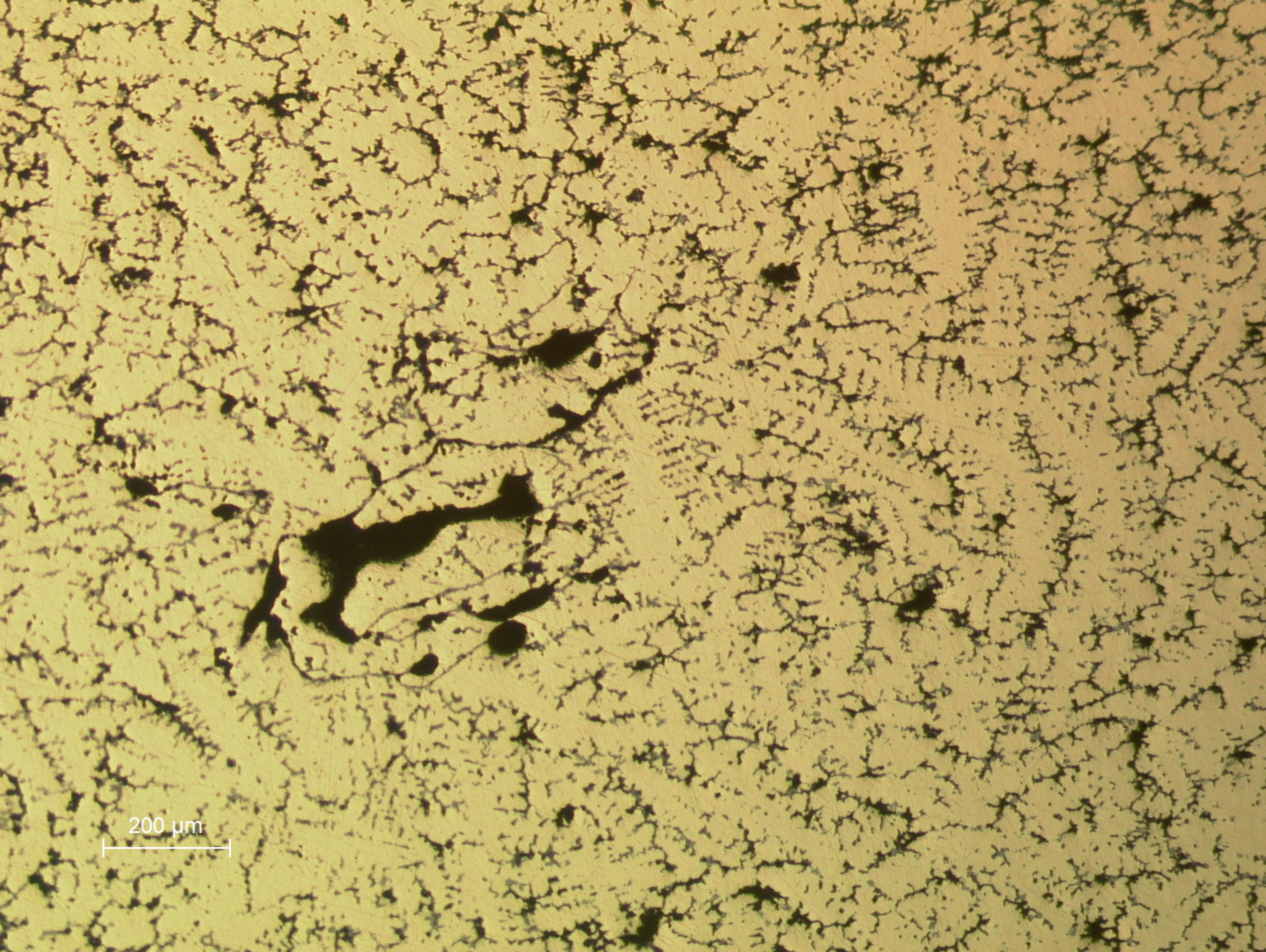
A58.2



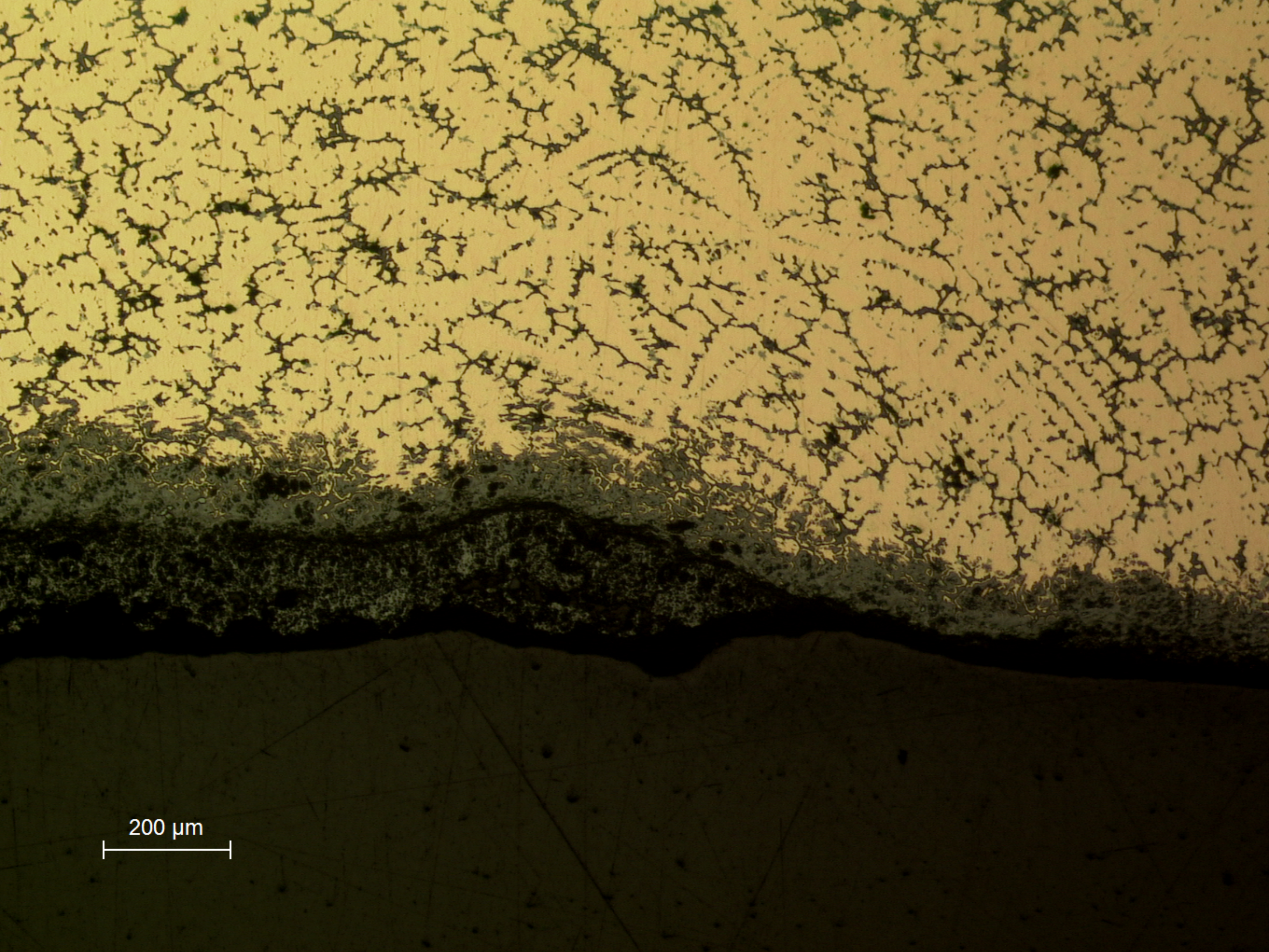
A58.3



A58.4

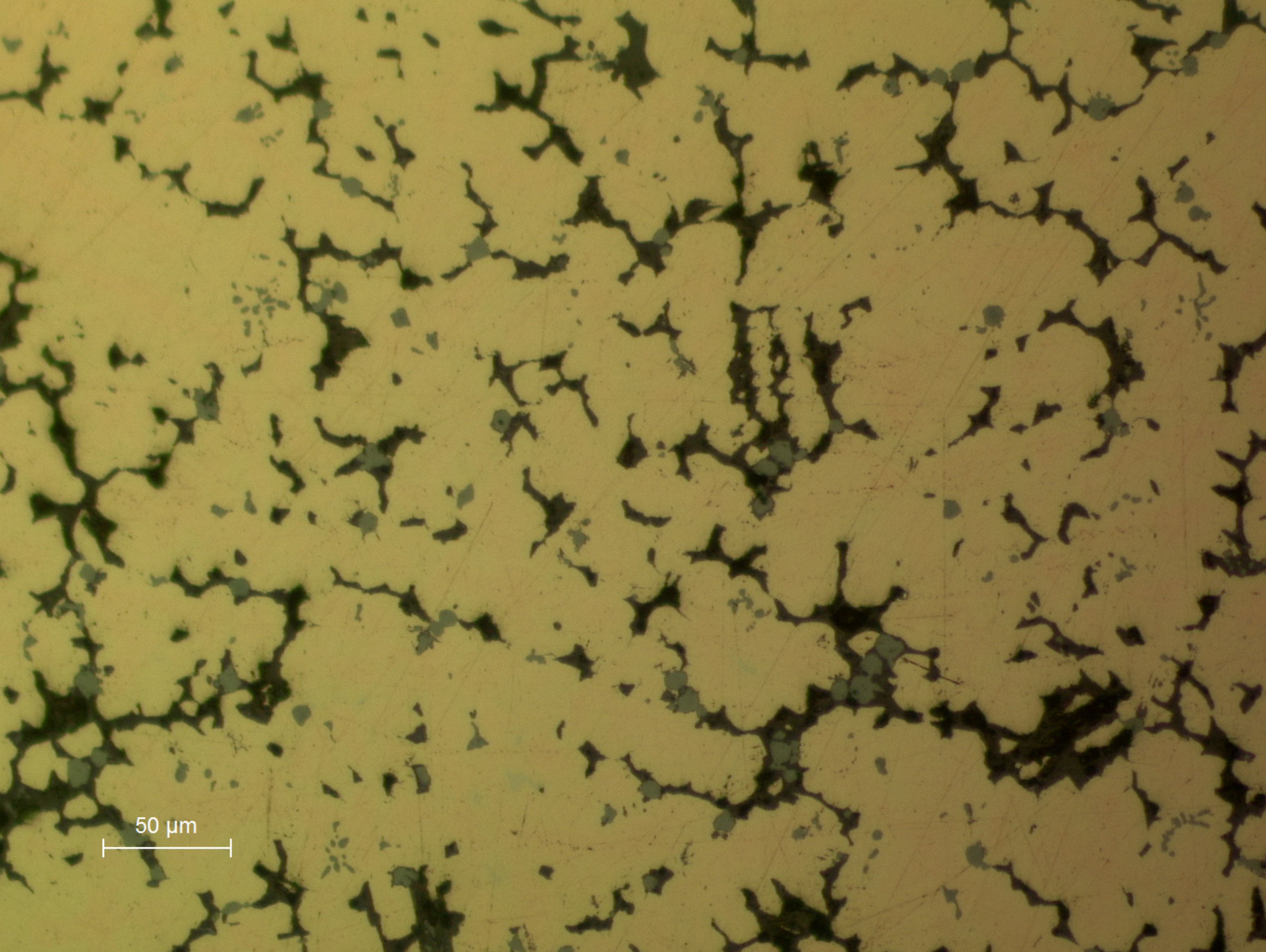


A58.1
General view: well defined dendritic structure, second phase and impurities in the interdendritic space, shrinkage cavities and a large number of pores.



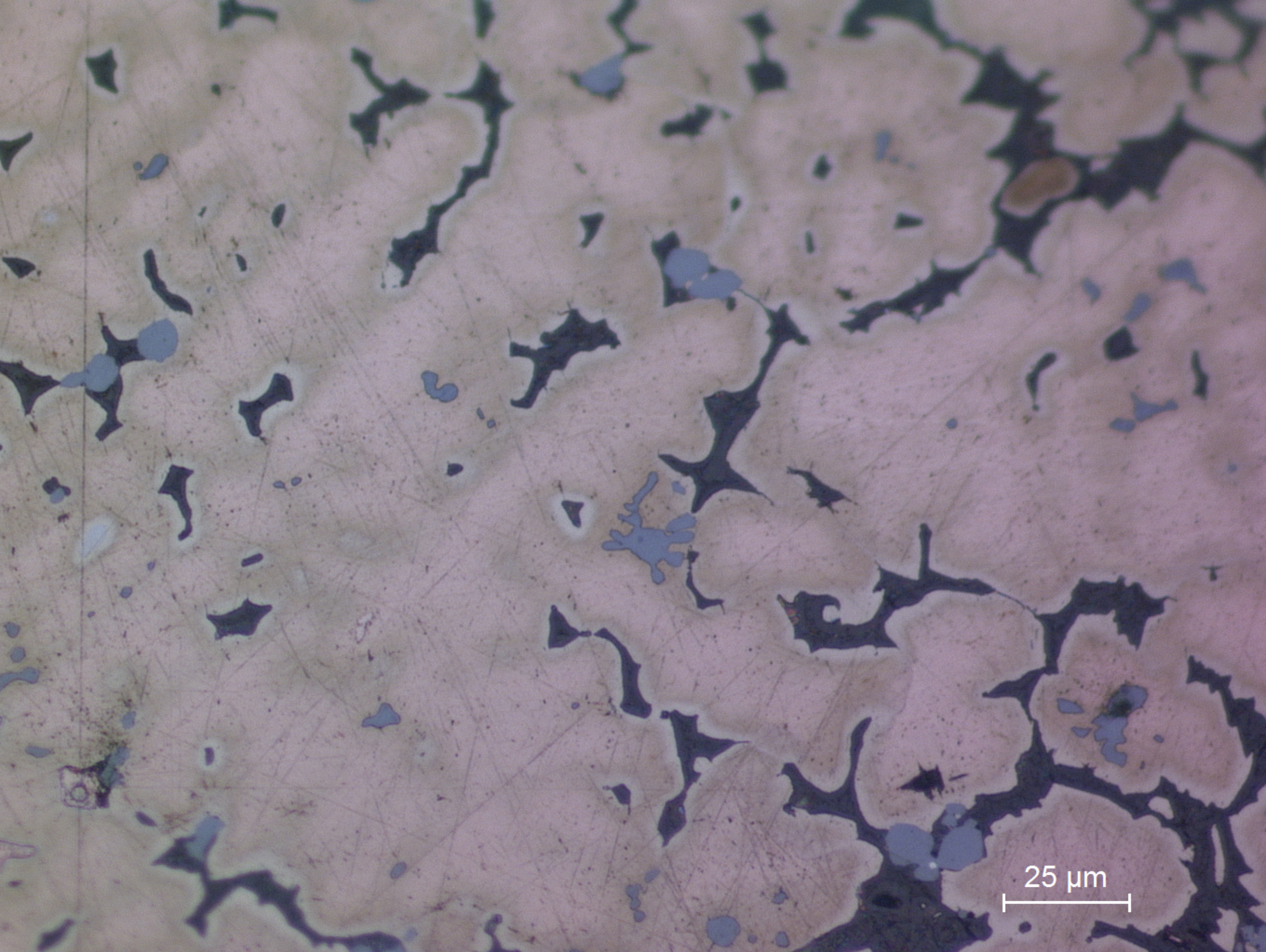
200 μm

A58.2
General view: slight deformation of dendrites near the surface and selective corrosion of the Cu-rich phase of the alloy.



50 μm

A58.3
Detail: interdentritic space presenting corroded eutectoid phase (dark grey), pores (black) and sulphide inclusions (grey).



25 μm

A58.4
Detail: cored dendrites (rose coloured in the middle); eutectoid (Sn-rich phase) and impurities (containing S) are visible in interdendritic space (etchant: aqueous FeCl_3).