

AzuRe168



Descrição: Azulejo do século XVIII (1700-1720); Origem: Lisboa.

Amostras: Fragmentos e uma secção semi-polida em depósito no *Museu Nacional do Azulejo* em Lisboa.

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 - ✓ Porosimetria de Mercúrio
- **Caracterização Química/Mineralógica**
 - ✓ Análise por SEM/EDS

AzuRe168





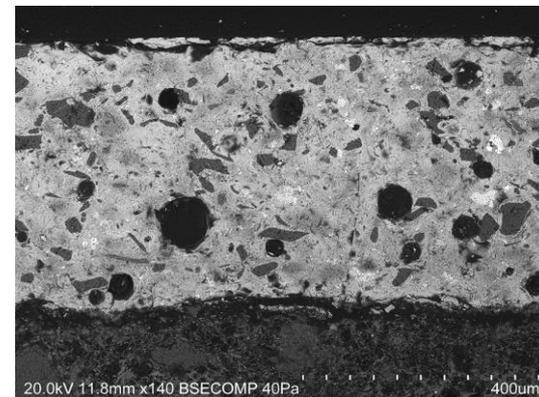
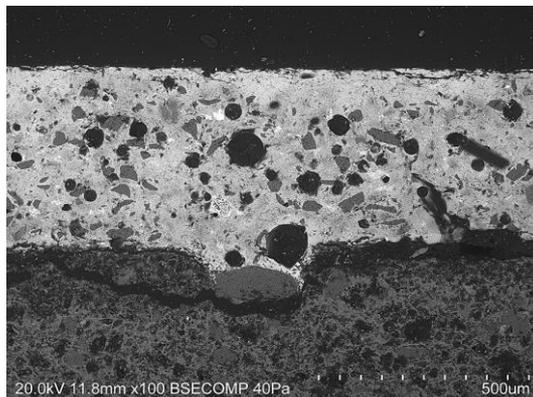
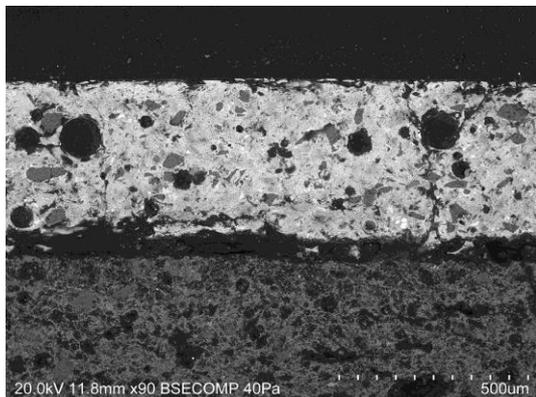
Azulejo com falhas de vidro a partir das arestas e empolamento do vidro.



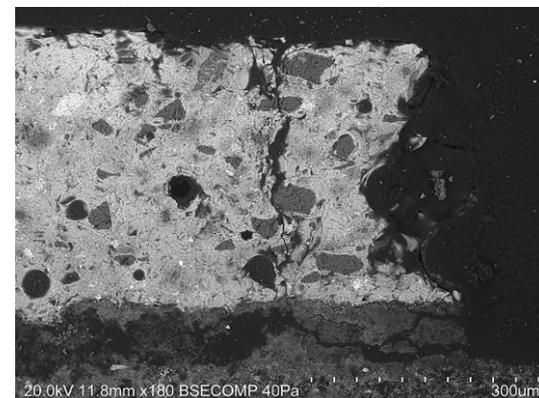
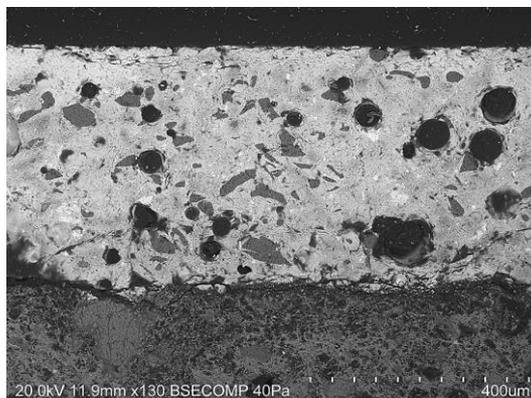
- Espessura do Azulejo = 18 mm



Chacota amarelada compacta com poros alongados e circulares; inclusões; vazios alongados e craquelé.

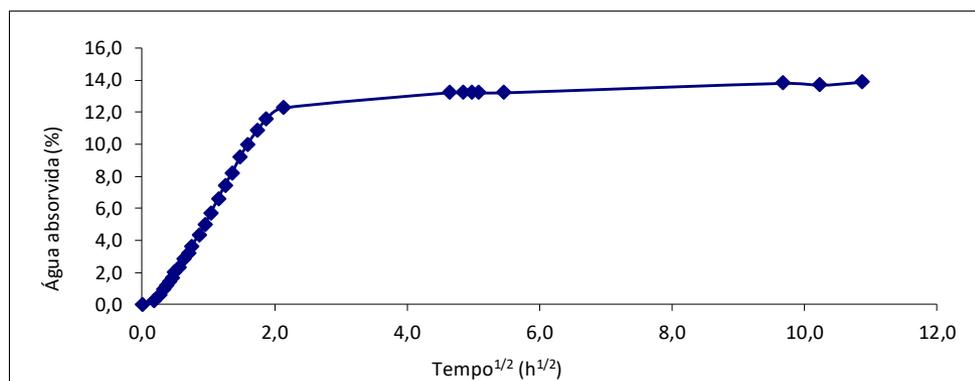


- Observa-se craquelé.
- Espessura do Vidrado=445 μm



Equipamento: Microscópio eletrónico de varrimento HITACHI 3700N acoplado a um espectrómetro de energia dispersiva de raios-X Bruker Xflash 5010.

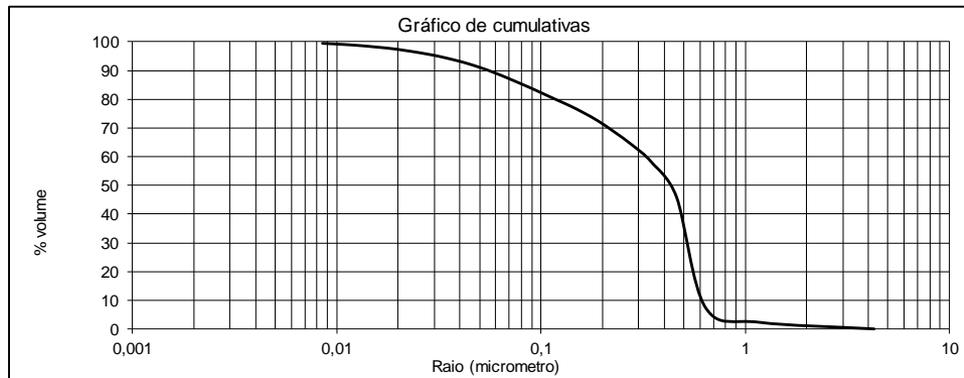
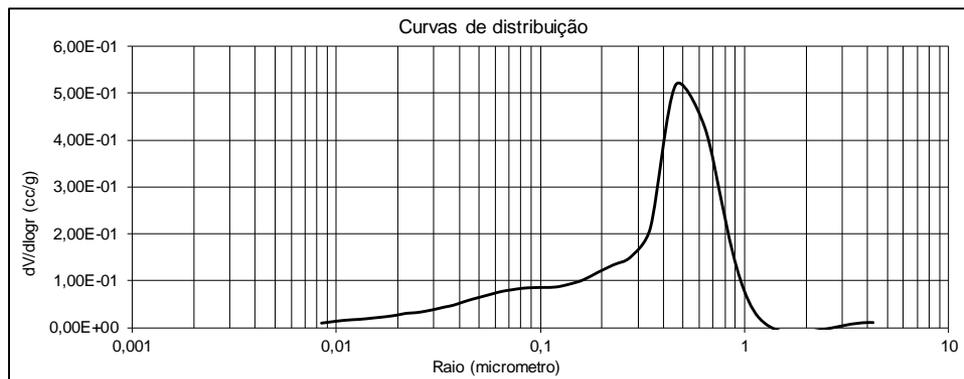
Curva de Absorção de Água (Chacota)



Massa volúmica real (kg/m³)	--
Massa volúmica aparente (kg/m³)	--
Porosidade aberta (vol %)	38,8
Coefficiente de capilaridade (kg/m²/h^{1/2})	1,5
Teor máximo de água (%)	23,3

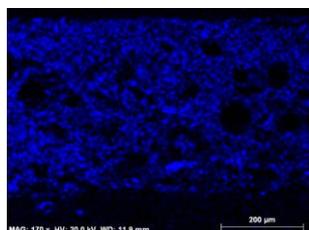
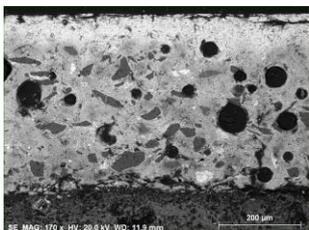
Procedimento: baseado na norma NP EN-13755.

Curvas de Porosimetria (Chacota)

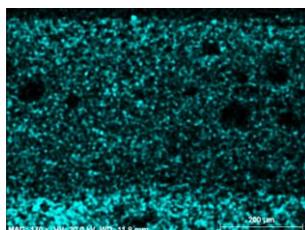


Procedimento: baseado na norma ASTM D4404-84.

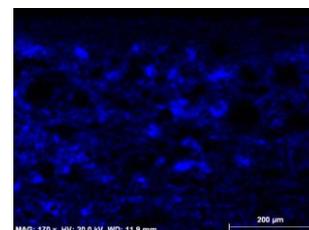
Equipamento: Porosímetro Quantachrome Autoscan



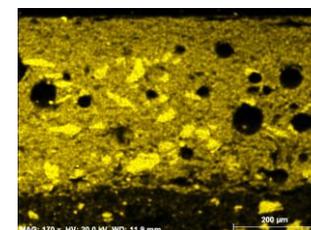
Na



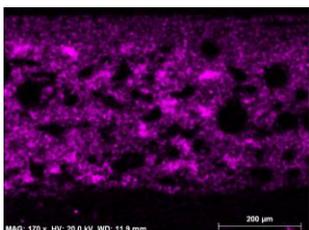
Mg



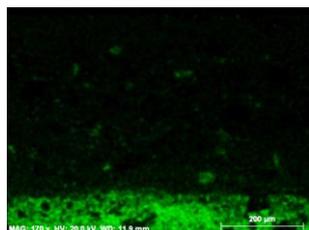
Al



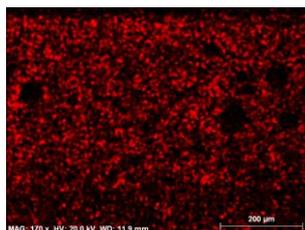
Si



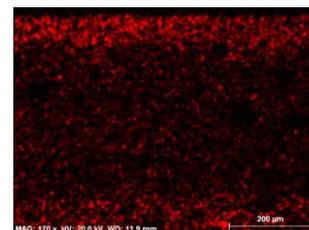
K



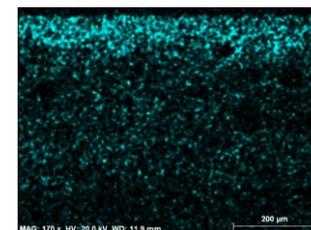
Ca



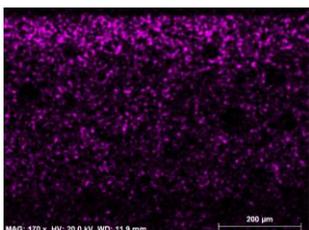
Ti



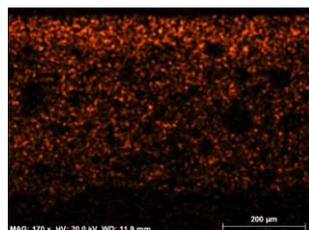
Fe



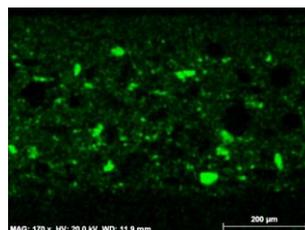
Co



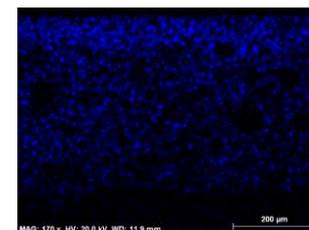
Ni



As

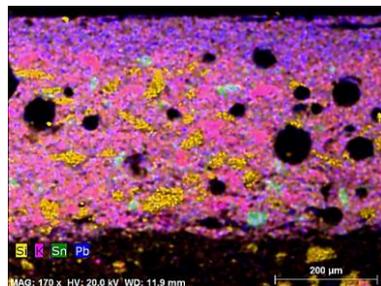
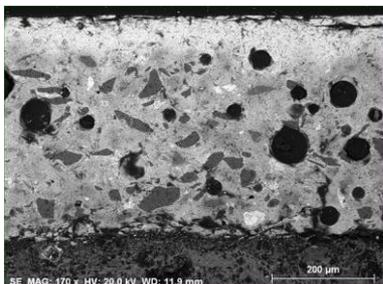


Sn

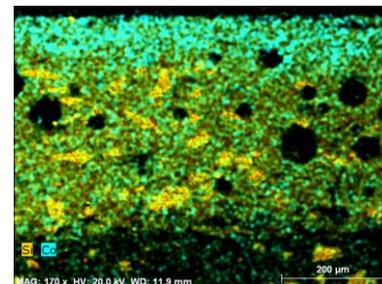


Pb

Equipamento: Microscópio eletrônico de varrimento HITACHI 3700N acoplado a um espectrómetro de energia dispersiva de raios-X Bruker Xflash 5010.



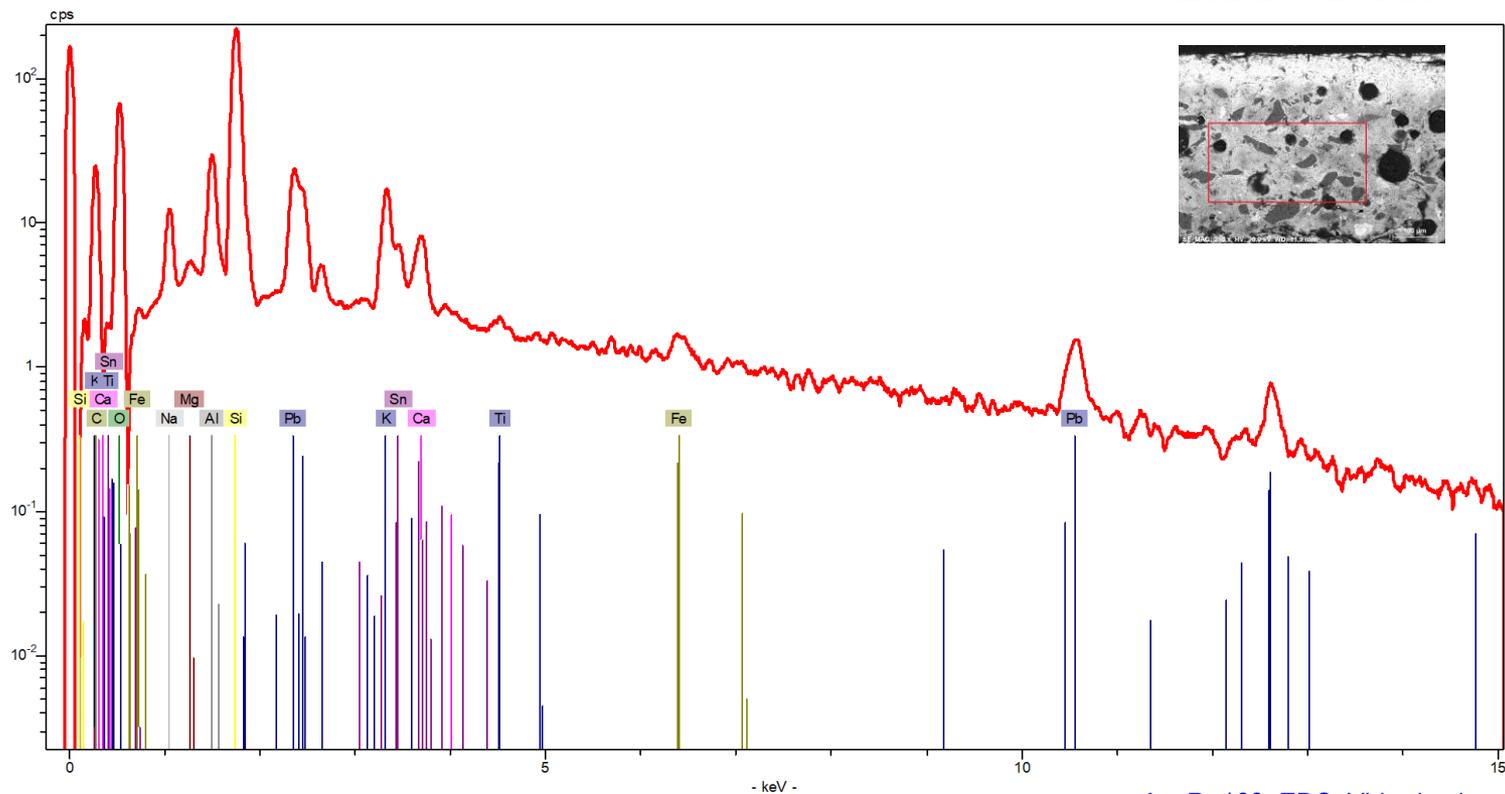
Combinação
Si_K_Sn_Pb



Combinação
Si_Co

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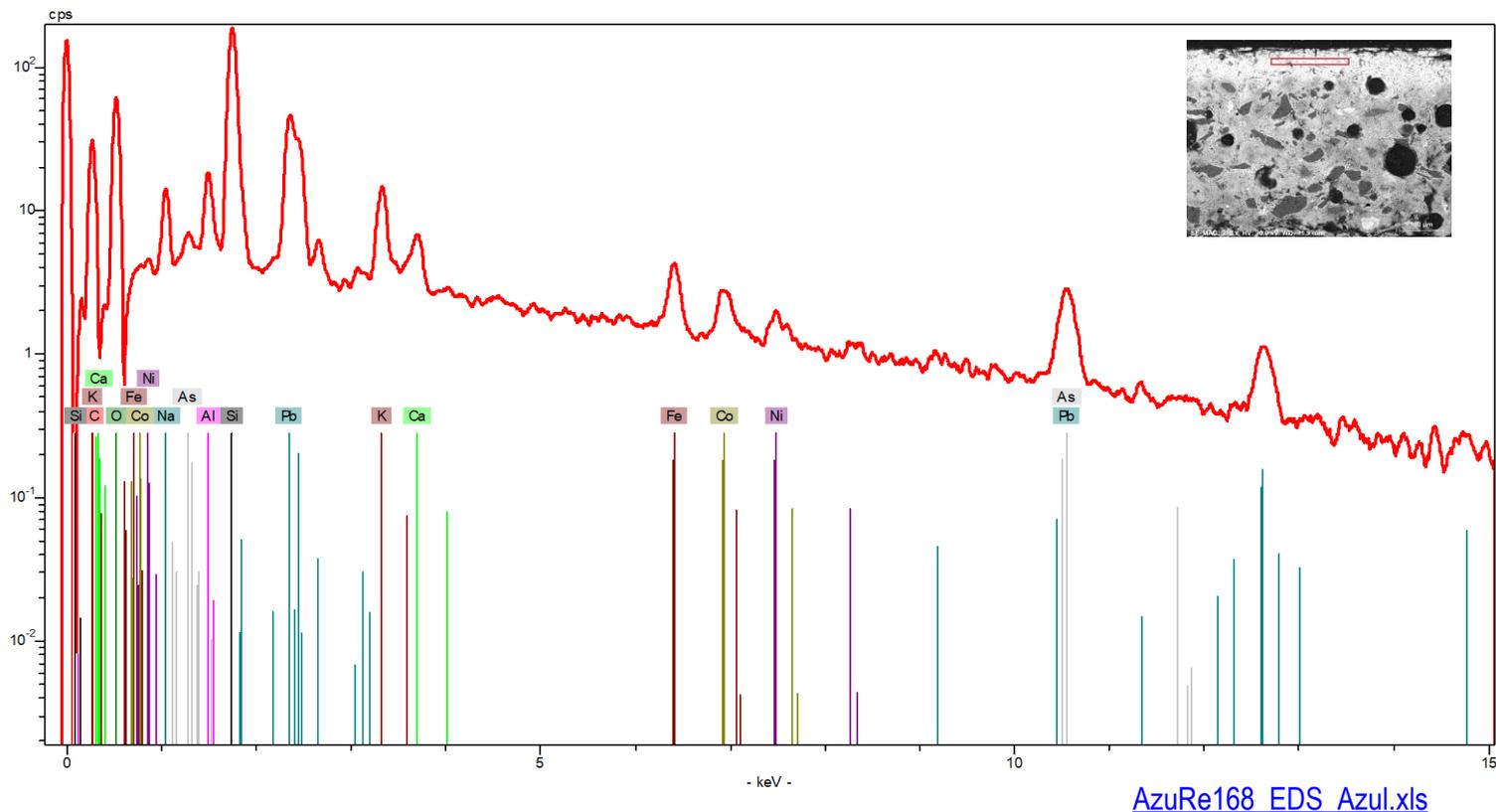
VIDRADO BRANCO



[Azure168 EDS Vidrado.xls](#)

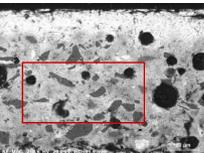
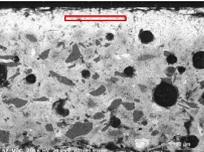
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PIGMENTO AZUL



Equipamento: Microscópio eletrónico de varrimento HITACHI 3700N acoplado a um espectrómetro de energia dispersiva de raios-X Bruker Xflash 5010.

Composição química (% m/m)*

Área Analisada	Na	Mg	Al	Si	K	Ca	Ti	Fe	Co	Ni	As	Sn	Pb
 vidrado branco	3,55	0,44	6,39	47,56	7,19	2,35	0,37	0,84	--	--	--	6,67	26,64
 pigmento azul	4,14	--	3,29	36,44	5,50	2,37	--	3,22	2,27	1,21	1,55	--	40,01

* - Os valores apresentados na tabela correspondem às percentagens mássicas dos elementos detetados na amostra, não considerando o teor de oxigénio e normalizados a 100% ([ver aviso](#)).

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