


Certificate of Testing Result

This is to certify that the below test report issued by ELIXANCE is for BK77AB Antibacterial+ produced by Euro Pentel S.A.S. The test samples Ref. 40877, and Ref.40980 correspond to barrels and caps of BK77AB, and the samples were analyzed according to ISO22196.

	Characterization report MT 40406	ENR-R&D-07	
		REV 01	Date d'application : 30/08/2018

Customer: EUROPENTEL
Date: 2020/10/23
Materials: Antibacterial MB – SAN & PC polymers
Tests required: *Measurement of antibacterial activity on plastics [ISO 22196]*

RESULTS

SANITIZED-laboratory tests: *Quantitative analysis for determination of the bacteriostatic activity*

EUROPENTEL REFERENCE	Barrel of BK77AB pen	Cap of BK77AB pen
ELIXANCE REFERENCE #1	40877	40980
ELIXANCE REFERENCE #2	AK0986	AK0987
PC LEXAN 121R <small>Polymer- Use level</small>		93.5%
SAN LURAN 358N004 <small>Polymer- Use level</small>	95%	
ANTIBACTERIAL MS 40406 <small>Masterbatch - Use level</small>	4%	6%
BLUE MS 40779 (blue opaque) <small>Masterbatch - Use level</small>	1%	
M144820B18 (blue transparent) <small>Masterbatch - Use level</small>		0,5%
Escherichia coli ATCC 8739 <small>Bacteriostatic activity value</small>	0,60	0,80
Escherichia coli ATCC 8739 <small>Reduction of bacterial growth</small>	74,88%	84,15%
Staphylococcus aureus ATCC 6538P <small>Bacteriostatic activity value</small>	1,60	1,90
Staphylococcus aureus ATCC 6538P <small>Reduction of bacterial growth</small>	97,49%	98,74%

ELIXANCE David LE PORHO R&D Manager	
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EURO PENTEL S.A.S

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Shinichi YAMASHITA

