Client: Smart Dent	**SO:** 1414/1374-25
Contact: Jonatan Pereira	
E-mail: jonatan@smartdent.com.br	**Phone:** (16) 3415-0530
Address: Rua Dr. Procópio de Tolêdo Malta, 62	**District:** Morada dos Deuses
City/State: São Carlos/SP	**Zip Code:** 13562-291
Date samples were received by Afinko: 03/06/2025	
Date the work was developed: 04/06/2025 to 30/10/2025	

SUMMARY

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1 SAMPLE(S) IDENTIFICATION

Sample sent by the client was identified by Afinko according to Table 1. Figure 1 show an image of the sample as received.

Table 1 – Sample(s) Identification

Afinko's Identification	Client's Identification
AFK253877	Smart Print Bio Vitality (Shade A2)

Figure 1 – Image of Sample AFK253877.

2 OBJECTIVES

To perform Flexural Test on 01 (one) sample to characterize it

3 METHODS

3.1 Flexural

The following table shows the test conditions.

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Table 2 - Flexural test conditions.

Lab Temperature: 23,4°C	**Lab Humidity:** 52%
Test Temperature: 23°C	**Number of Test Specimens:** 05
Load Cell: 500 N	**Span:** 20 mm
Test Speed: 1,00 mm/min	
Specimens Dimensions:	**Width:** (2,11 ± 0,03) mm
	Thickness: (2,00 ± 0,01) mm
Specimens Preparation:	( ) Injection
	( ) Machining
	( ) Stamping
	(X) Sent by the client
Perform Date: 17/07/2025	
Equipment(s): Instron EMIC, model 23-30	
Standard Test Method(s):	ABNT NBR ISO 4049: 2017 – "Odontologia — Materiais restauradores poliméricos" ABNT NBR ISO 10477: 2022 – "Odontologia — Materiais à base de polímero para coroa e veneer"

4 RESULTS

4.1 Flexural

Figure 2 shows the stress curves as a function of the strain. Table 3 shows the test results.

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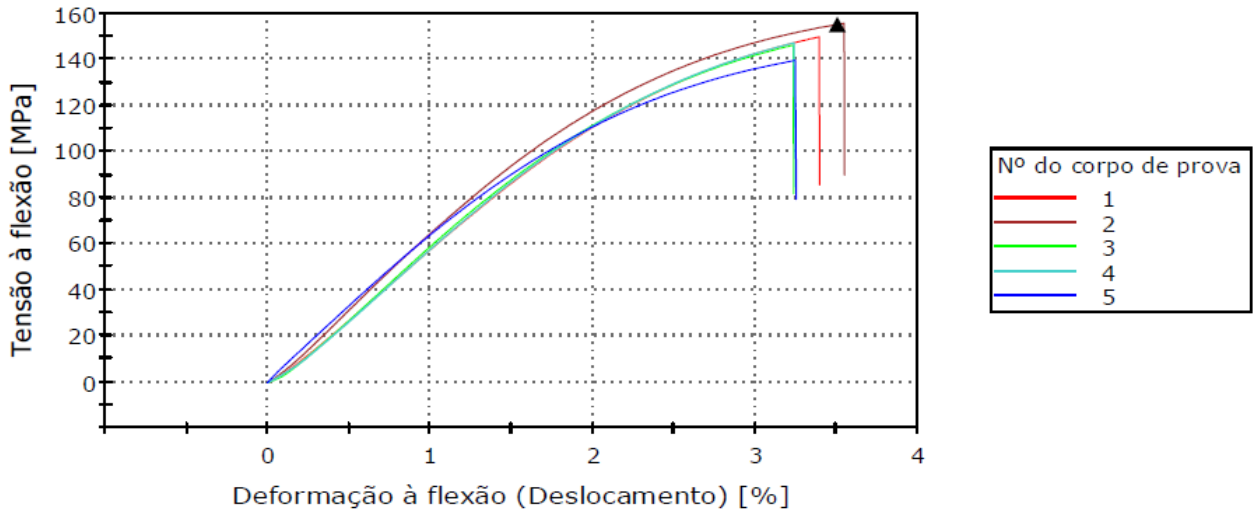

Figure 2 – Stress x Strain curves of sample AFK253877.

Table 3 - Flexural test results.

Sample	Sp	Flexural Modulus (GPa)	Flexural Resistance (MPa)	Flexural Strain (%)
AFK253877	**1**	5,12	149,67	3,39
	2	5,95	155,55	3,54
	3	5,16	146,11	3,23
	4	4,64	147,13	3,24
	5	6,60	139,51	3,24
Average		**5,49**	**147,59**	**3,33**
Standard Deviation		**0,78**	**5,82**	**0,14**

5 CONCLUSIONS

In the following table is a summary of the results obtained in this work.

Table 4 – Summary of the Results.

Test	Property	AFK253877
Flexural	**Flexural Modulus (GPa)**	5,49
	Flexural Resistance (MPa)	147,59
	Flexural Strain (%)	3,33

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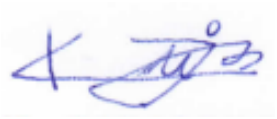
São Carlos, October 30, 2025.



Kenji Nishiyama Bueno Rosa
Researcher

Marcio Kobayashi, PhD
Technical Director

Final observations

- This report cancels and replaces the previous one with the same number. Review 01: The ISO 10477 standard was referenced in the methodology. Review 02: The years of the standards have been added and the client identification of sample has been modified. Review 03: The reported standard was brought into conformity, as requested by the client.
- Results presented in this report refer exclusively to the analyzed samples, at the exact conditions the tests were performed and therefore, they must not be extended to any lot, even if similar to the ones analyzed. Additional images were inserted at completion.
- The laboratory is not responsible in case of misinterpretation of data nor eventual improper use of the document.
- The reproduction of this document must be done in full.
- Samples are maintained at Afinko for two months or for the period specified by the budget/contract.
- Afinko considers the result obtained through the tests as a comparative value to the classification referenced in the technical standards, when applied. Measurement uncertainty will only be expressed in the Technical Report upon customer's request.

-- End of report --

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