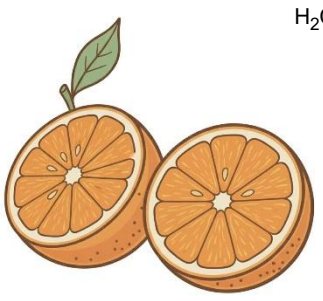
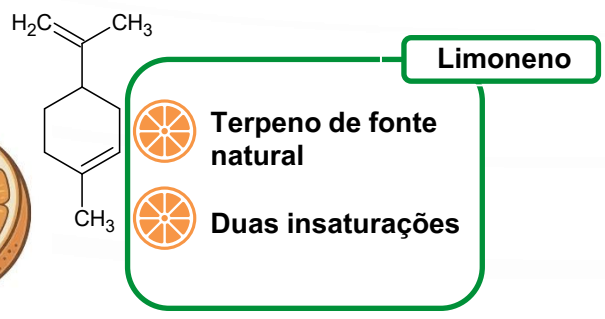
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26° Congresso Brasileiro de Engenharia e Ciência dos Materiais
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Costão do Santinho
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# COMPARATIVO DE ATIVIDADE ANTIOXIDANTE DE OLIGÔMEROS DERIVADOS DE LIMONENO OBTIDOS POR POLIMERIZAÇÃO CATIÔNICA E POLIMERIZAÇÃO RADICALAR POR TRANSFERÊNCIA DE ÁTOMOS ORGANOCATALISADA

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## Introdução






**Propriedades**

- Antioxidante
- Antimicrobiana



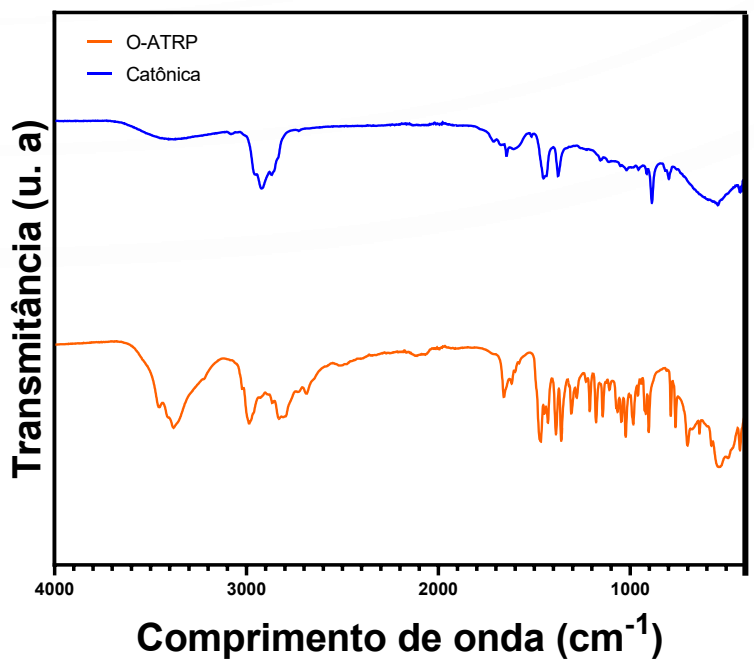
**Polimerização**

- O-ATRP
- Catiônica

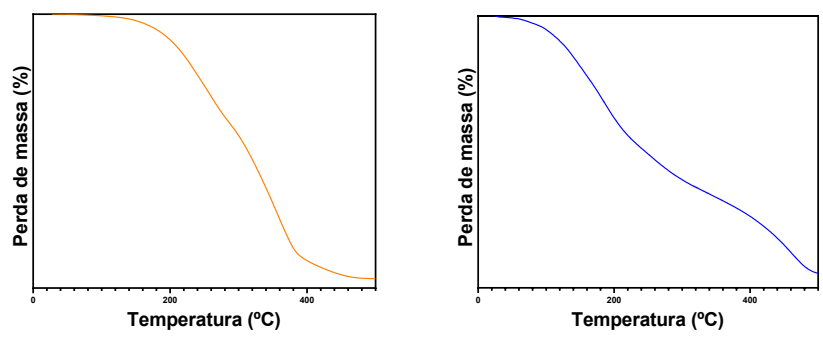
## Metodologia

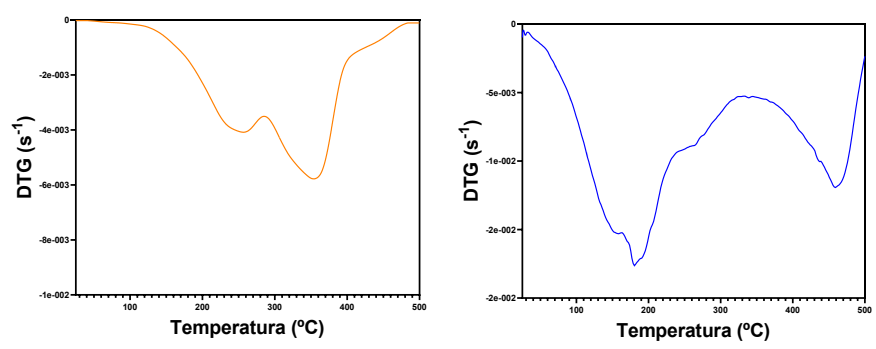


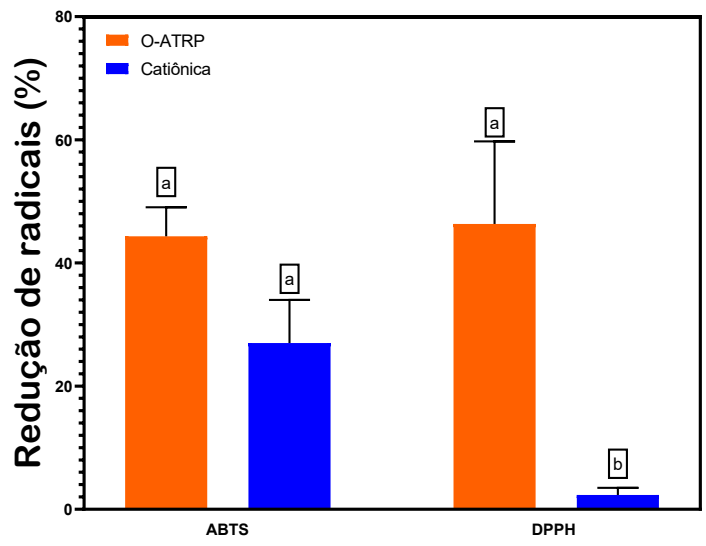

## Resultados e Discussão




| | |
|---|---|
| O-ATRP | $\bar{M}_n = 1.330\ Da$ |
| Catiônica | $\bar{M}_n = 538\ Da$ |




## Referências

AJALA, O. A.; NAKAICHI, S.; OSHIKI, T.; NAKAYAMA, Y.; SHIONO, T.; TANAKA, R. Origin of the Two Major Types of Repeating Units in Poly(β-pinene) Obtained by Cationic Polymerization. **Macromolecules**, v. 57, n. 19, p. 9257–9264, 2024. DOI: 10.1021/acs.macromol.4c01663.
OLIVEIRA, E. R. M. de; VIEIRA, R. P. Synthesis and Characterization of Poly(limonene) by Photoinduced Controlled Radical Polymerization. **Journal of Polymers and the Environment**, v. 28, p. 2931–2938, 2020.
TOLEDO, G. F.; SCHUTZ, G. F.; MARANGONI JÚNIOR, L.; VIEIRA, R. P. Thermo-pressed blend films of poly(lactic acid)/poly(butylene adipate-co-terephthalate) with polylimonene for sustainable active food packaging. **Sustainable Materials and Technologies**, v. 41, p. e01099, set. 2024. DOI: 10.1016/j.susmat.2024.e01099.

## Agradecimentos

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