Reviewer 1

The combining epoxy pre-polymer (EP) with a silyl-modified polyether (SIL) has a potential possibility to obtain materials with excellent toughness at a high strength and flexibility.Therefore, the research on this aspect has received wide attention. In this manuscript, the effects of different catalyst on the mechanical and rheological performance of the productions from individual and dual component of SIL and EP were investigated. Some conclusions obtained from this manuscript have reference values to some extent for the study of adhesive materials. However, authors should consider the following suggestions.

1. Some problems related to reference. As an academic paper, some irformal literatures should be avoided to citated. For example, the reference [1]-[3],[11]. Additionally, some cited literatures do not correspond to the theme elaborated in the text. For example, the literature 14 is a platinum-containing catalyst rather than a tin-containing catalyst. Literature 18 has no relationship to SIL/EP. Line 41, " In the current research attention is devoted to research..... [18]", how does the 1983 literature stated the recent events. All the literature cited in the full text is in the introduction. This citation method is extremely hasty.

Response

References 2,3, 11, 18 were changed to different references, as well added two more.

<u>Replacement of 2 and 3.</u>

1. X. Jin N. Guo, Z. You, Y. Tan. Design and Performance of Polyurethane Elastomers Composed with Different Soft Segments. Materials 2020, 13(21), 4991;

2. R. V. Gadhave, C. R. Gadhave, P. V. Dhawale. Silane Terminated Prepolymers: An Alternative to Silicones and Polyurethanes. Open Journal of Polymer Chemistry 2021, vol.11 No.3.

<u>Replacement of 11.</u>

11. M. E. Belowich, J. M. Roberts, T. H. Peterson, E. Bellinger, K. Syverud, T. Sidle. Lewis Acids As Highly Active Silanol Polycondensation Catalysts Affording Low Levels of Cyclosiloxanes. Macromolecules 2020, 53, vol 17, 7487–7495.

<u>Addition to references.</u>

12. A. A. Issa, Adriaan S. Luyt. Kinetics of Alkoxysilanes and Organoalkoxysilanes Polymerization: A Review. Polymers 2019, 11(3), 537; https://doi.org/10.3390/polym11030537.

15. S. L. Burkett, S. Soukasene, K. L. Milton, R. Welch, A. J. Little. Tethered Constrained-Geometry Catalysts in Meso-porous Silica: Probing the Influence of the "Second Sphere" on Polymer Properties. Chem. Mater. 2005, 17, 2716-2723.

2. In the results and discussion, the obtained experimental results should be explained from the structural characteristics of the different catalysts used, rather than just the description of the phenomenon. For example, the different results caused by tin-containing catalysts or nitrogen-containing catalysts with different structure should be explained. Otherwise, the manuscript is an experimental report rather than an academic paper.

The content of the publication was supplemented with explanations of various reaction mechanisms.

3. Line 101, “DBU was tested at two catalyst concentrations of 0.5 and 4%...” , However, in Table 2, there is not a concentration in 0.5%.

The formulations in the second table are related to the model system tests, which were tested for rheological and mechanical properties. These systems were obtained by mixing both prepolymers together. The highest concentration of DBU was chosen, because at the lowest concentration practically no catalysis of the prepolymer took place.

4. Line 96, “whereas the most effective was Tibcat 318 (dioctyl tin dicarboxylate)..” , Does this sentence meet the result showed in Figure 1a.

Thank you for spotting the error.

An error occurred when rewriting in another format, Tibcat 318 was mixed in place with Tibcat 410 in places.

5. In Figure 1b, whether the the curve for DBU 0.5% and curve for DBU 4% should be transposed.

Necessary changes were made