ELECTRONIC SUPPORTING INFORMATION

Stereodynamic insight of the thermal history effect on poly(vinyl chloride) calorimetric sub-glass and glass transitions as fragile glass model

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I. Sets of normalized C\textsubscript{p} curves and fitting details from glass transition measurements.....S2
II. Fitting details of the apparent activation energy surface..................................................S4
I. Sets of normalized $C_p$ curves and fitting details from glass transition measurements

**Figure S1.** Normalized $C_p$ curves assimilated to a conversion $\alpha$, each graphic contain a set of four curves collected at the heating rates of 10, 15, 20, 25 °C.min$^{-1}$ for a specific thermal history.
**Figure S2.** Fits of the glass transition temperatures for different pre-cooling rates.

The graph shows a linear relationship between the glass transition temperature and the rate on heating for various pre-cooling rates. The data points are plotted with different colors and shapes to distinguish between the rates, and the trend lines are indicated by red lines. The table below summarizes the equation parameters for each pre-cooling rate, including the intercept and slope values, along with their standard errors.
II. Fitting details of the apparent activation energy surface

Polynomial fitted equation with related details can be found below:

\[ z = z_0 + a \cdot x + b \cdot y + c \cdot x^2 + d \cdot y^2 + f \cdot x \cdot y; \]

<table>
<thead>
<tr>
<th>Value</th>
<th>Standard Error</th>
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<tbody>
<tr>
<td>388.37694</td>
<td>2.92927</td>
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<tr>
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<td>33.35855</td>
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<td>-0.77648</td>
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<td>-336.47117</td>
<td>6.88413</td>
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<tr>
<td>26.10906</td>
<td>0.64696</td>
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</table>

Number of Points 846
Degrees of Freedom 840
Reduced Chi-Sqr 173.80489
Residual Sum of Squares 145996.11025
Adj. R-Square 0.95362