SUPPORTING FILE

of

Curing Kinetic Analysis and Isothermal Prediction of DBTL Catalyzed Polyurethane Reaction by Differential Scanning Calorimetry

Seçil SEVİM ÜNLÜTÜRK, Necati GÜDÜMCÜOĞLU

Kansai Altan Paint Industry and Trade Inc. Kemalpasa, İzmir, 35730, Türkiye

*secil.unluturk@kansaialtan.com.tr, +90 555 258 5992

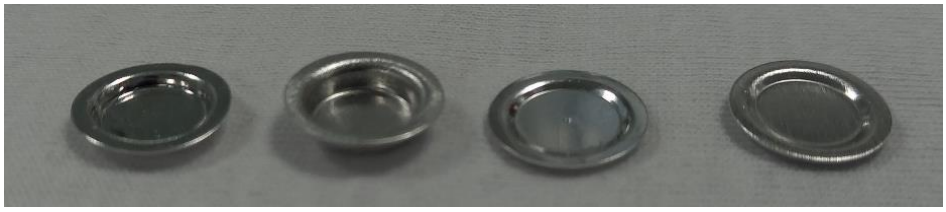

Image S1. The pans that used in DSC measurements. From left to right, 10 µL sample holder, 50 µL sample holder, cover with and without a pin. For the curing measurements 50 µL sample holder and cover with a pin used.

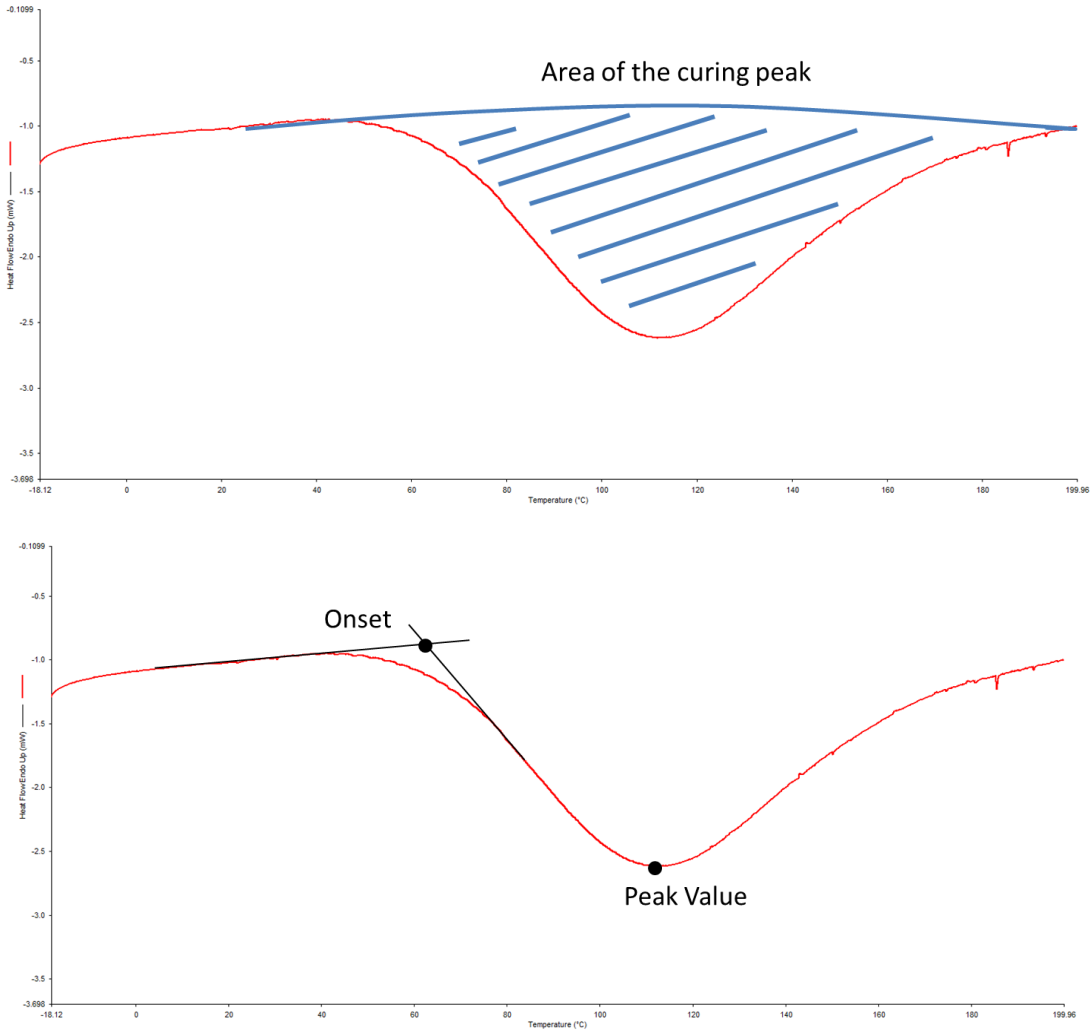

Figure S1. The representative calculation of curing enthalpy by the area of the curing peak (upper curve) and curing onset and peak value (lower curve)

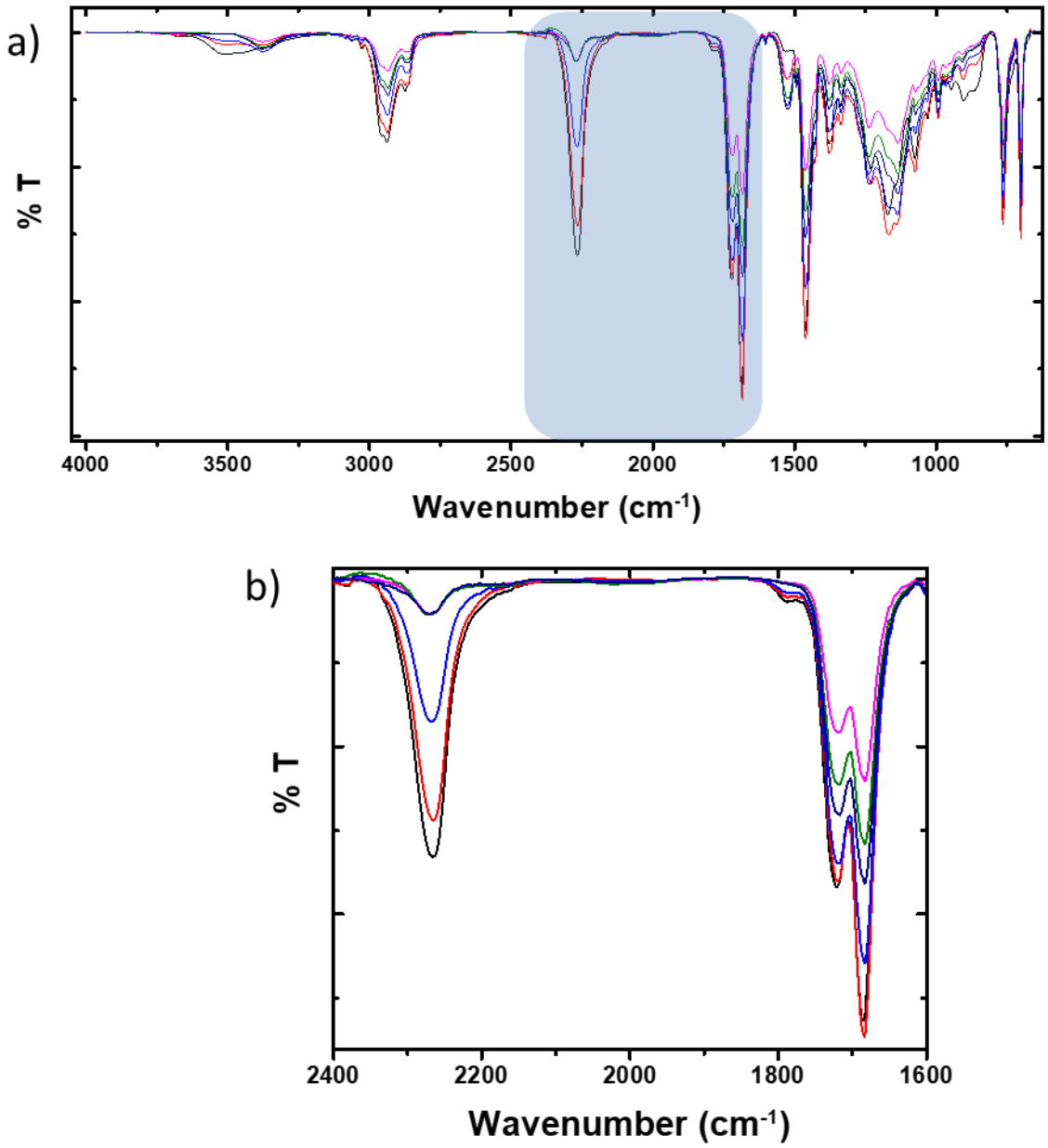

Figure S2: FTIR spectra of polyurethane samples with different curing times. (b) shows the enlarged area of the blue region showed in (a). Polyurethane peak around 1680 cm^{-1} decreases with decreasing NCO peak at 2270 cm^{-1} because of signals of the unreacted reagents (shown in Figure 5 in main text)

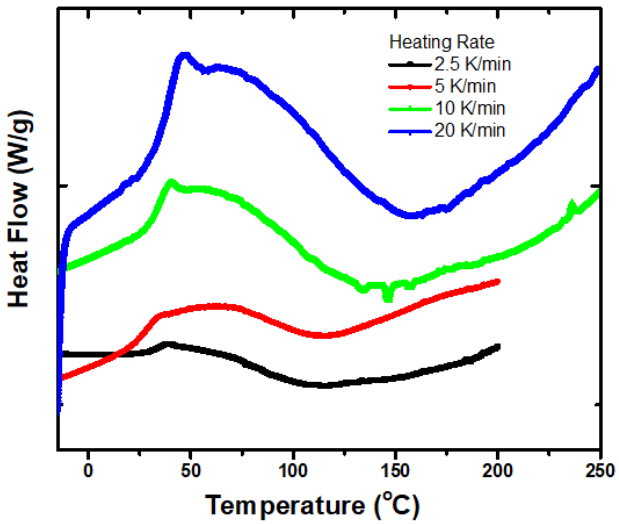

Figure S3: Curing curves of C2 sample with different heating rates. Ti and Tp values shift to the higher temperatures and the intensity of the signals of Tg and curing peaks increases with respect to heating rate.

Table S1. Activation energy and correlation coefficient of C1 and C2 samples with curing time 30 minutes at 80°C calculated by Ozawa and Kissinger methods.

Sample	Ozawa Method		Kissinger Method	
	Activation Energy	**Correlation coefficient**	**Activation Energy**	**Correlation coefficient**
C1	24.1 (±5.0)	0.9997	23.3 (±4.8)	0.9997
C2	19.5 (±3.7)	0.9975	19.2 (±3.7)	0.9970

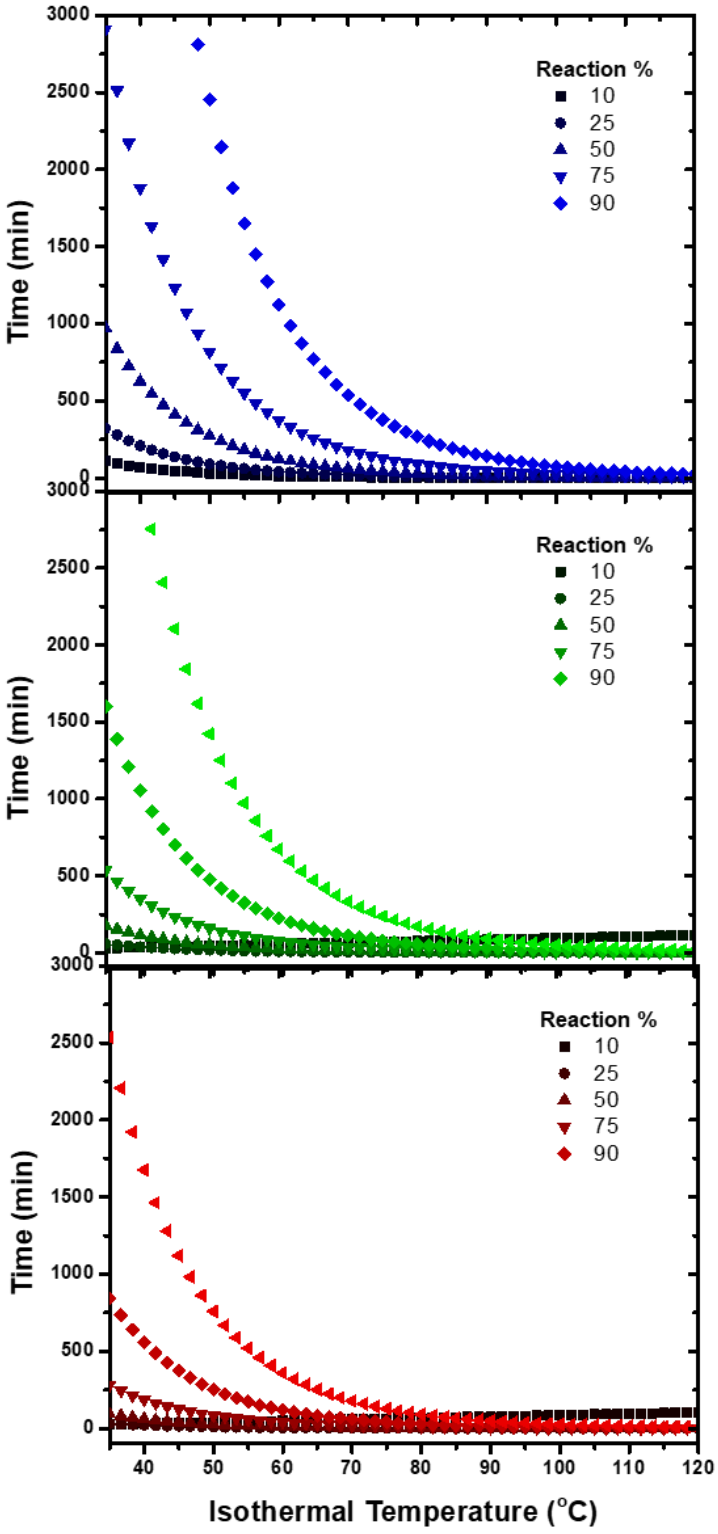

Figure S4. Isothermal conversion predictive curves for C1 (Blue), C2 (green) and C4 (red) samples.