Supplementary Information

Production of a PET//LDPE Laminate Using a Reversibly Crosslinking Packaging Adhesive and Recycling in a Small-Scale Technical Plant

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Infrared Spectra

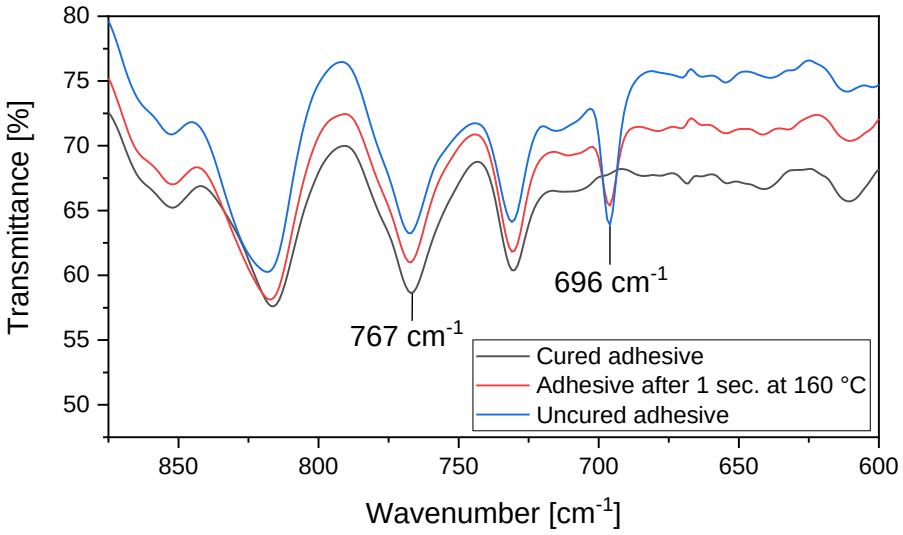

Figure S1. Comparison of the ring deformation band of the maleimide group at 696 cm^{-1} of the cured adhesive exposed to 160 °C for 1 second and the cured/uncured adhesive.

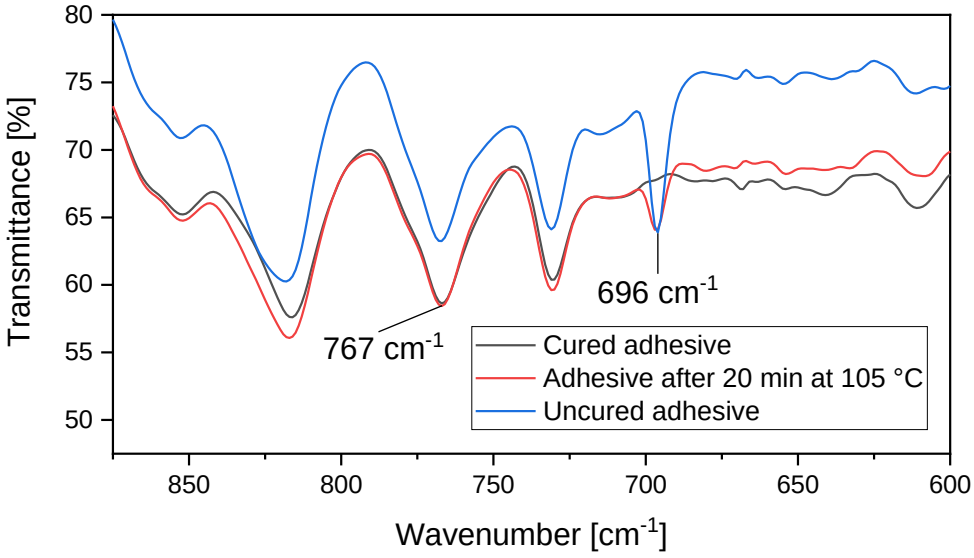

Figure S2. Comparison of the ring deformation band of the maleimide group at 696 cm-1 from the cured adhesive exposed to 105 °C for 20 min and the cured/uncured adhesive.

DSC Curves

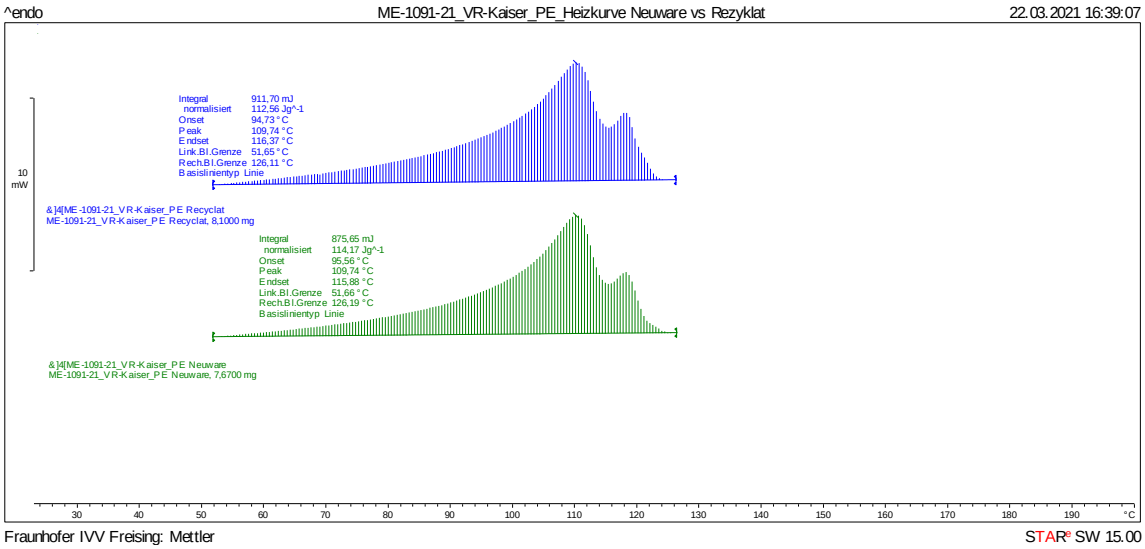

Figure S3. DSC curve of the initial PE film (green) and recycled PE film (blue).

Table S1. Data from DSC evaluation of initial PE film and recycled PE film.

	Initial PE film	Recycled PE film
Normalized integral	114.17 J/g	112.56 J/g
Onset	95.56 ℃	94.73 ℃
Peak	109.74 ℃	109.74 ℃
Endset	115.88 ℃	116.37 ℃
Left boundry	51.66 ℃	51.65 ℃
Right boundry	126.19 ℃	126.11 ℃
Degree of crystallization	38.97%	38.42%

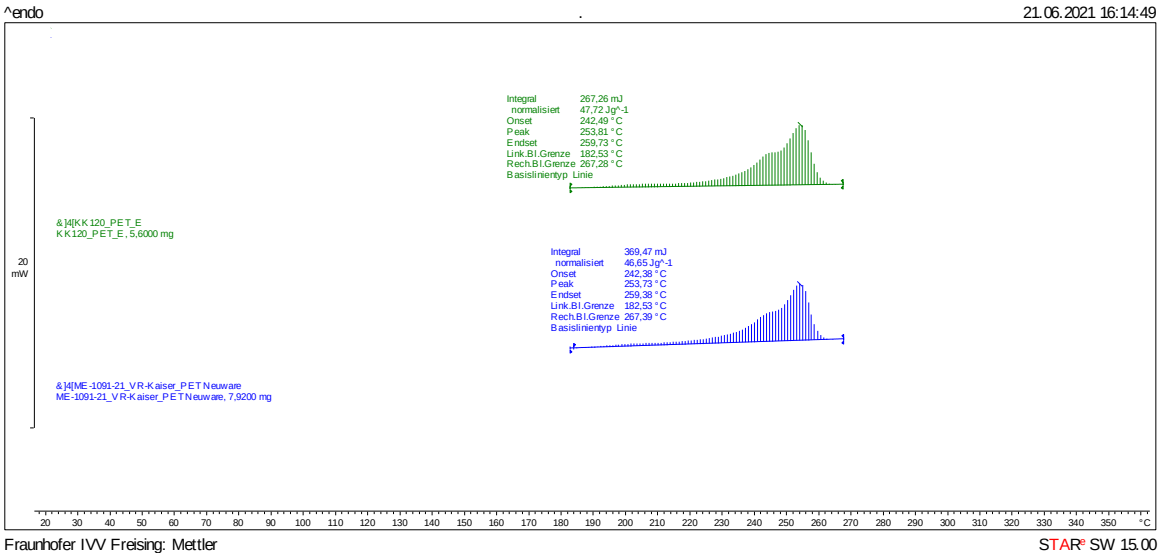

Figure S4. DSC curve of initial PET film (blue) and regranulated PET (green).

Table S2. Data from DSC evaluation of initial PET film and reganulated PET.

	Initial PET film	Recycled PET
Normalized integral	46.65 J/g	47.72 J/g
Onset	242.38 ℃	242.49 ℃
Peak	253.73 ℃	253.61 ℃
Endset	259.36 ℃	259.73 ℃
Left boundry	182.53 ℃	182.53 ℃
Right boundry	267.39 ℃	267.28 ℃
Degree of crystallization	33.32%	34.09%

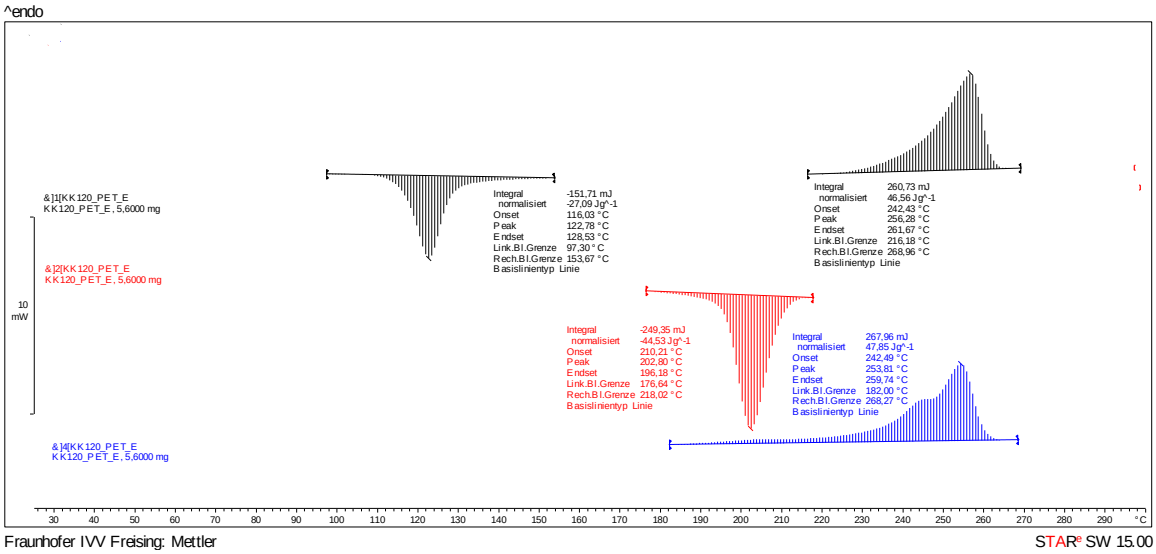

Figure S5. DSC curves of the recycled PET. Shown are the first heating run in black, the cooling curve in red and the second heating run in blue.