Supporting information for:

Sulphur-containing fatty acid-based plasticizers via thiol-ene addition and oxidation: Synthesis and evaluation in PVC formulations.

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1. Viscosity analyses of PVC plastisols

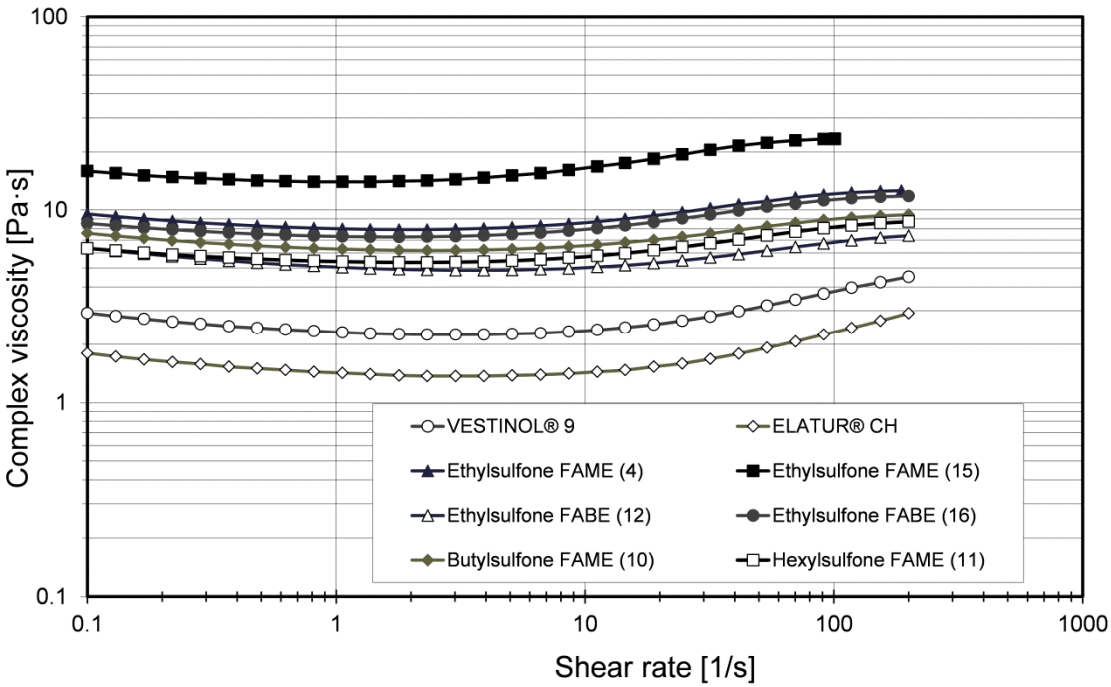

Figure S1. Variation of complex viscosity with shear rate of PVC plastisols containing reference plasticizers ELATUR® CH and VESTINOL® 9, and synthesized sulfone-containing fatty acid-based plasticizers. Analysis performed after 2 h of aging at 25 ºC.

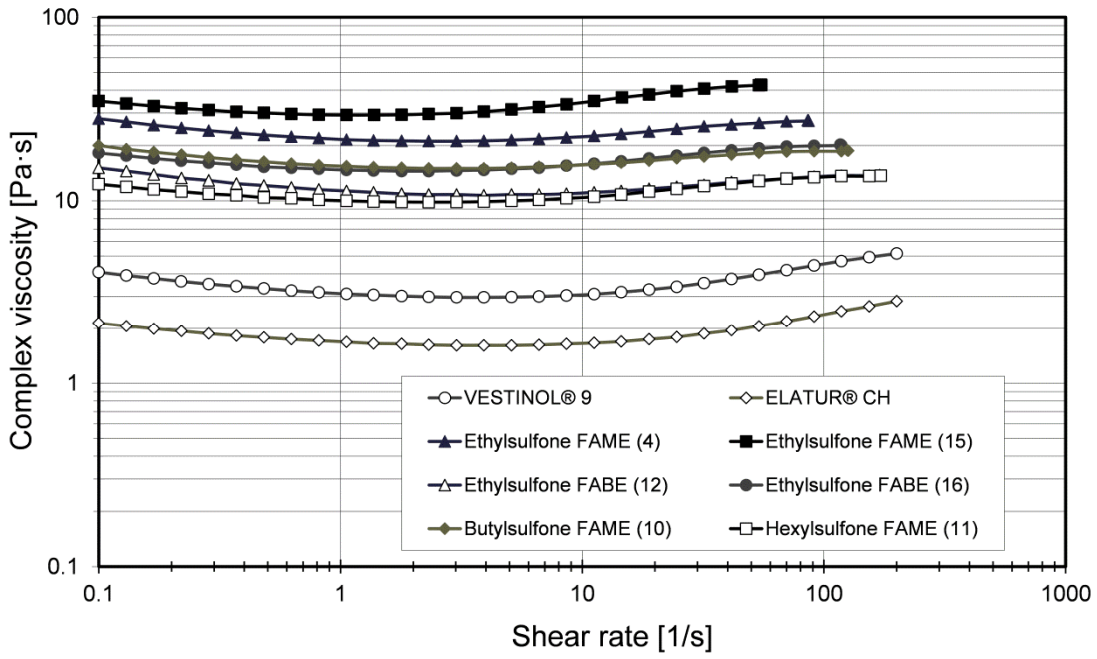

Figure S2. Variation of complex viscosity with shear rate of PVC plastisols containing reference plasticizers ELATUR® CH and VESTINOL® 9, and synthesized sulfone-containing fatty acid-based plasticizers. Analysis performed after 7 days of aging at 25 ºC.

2. Thermal stability measurements

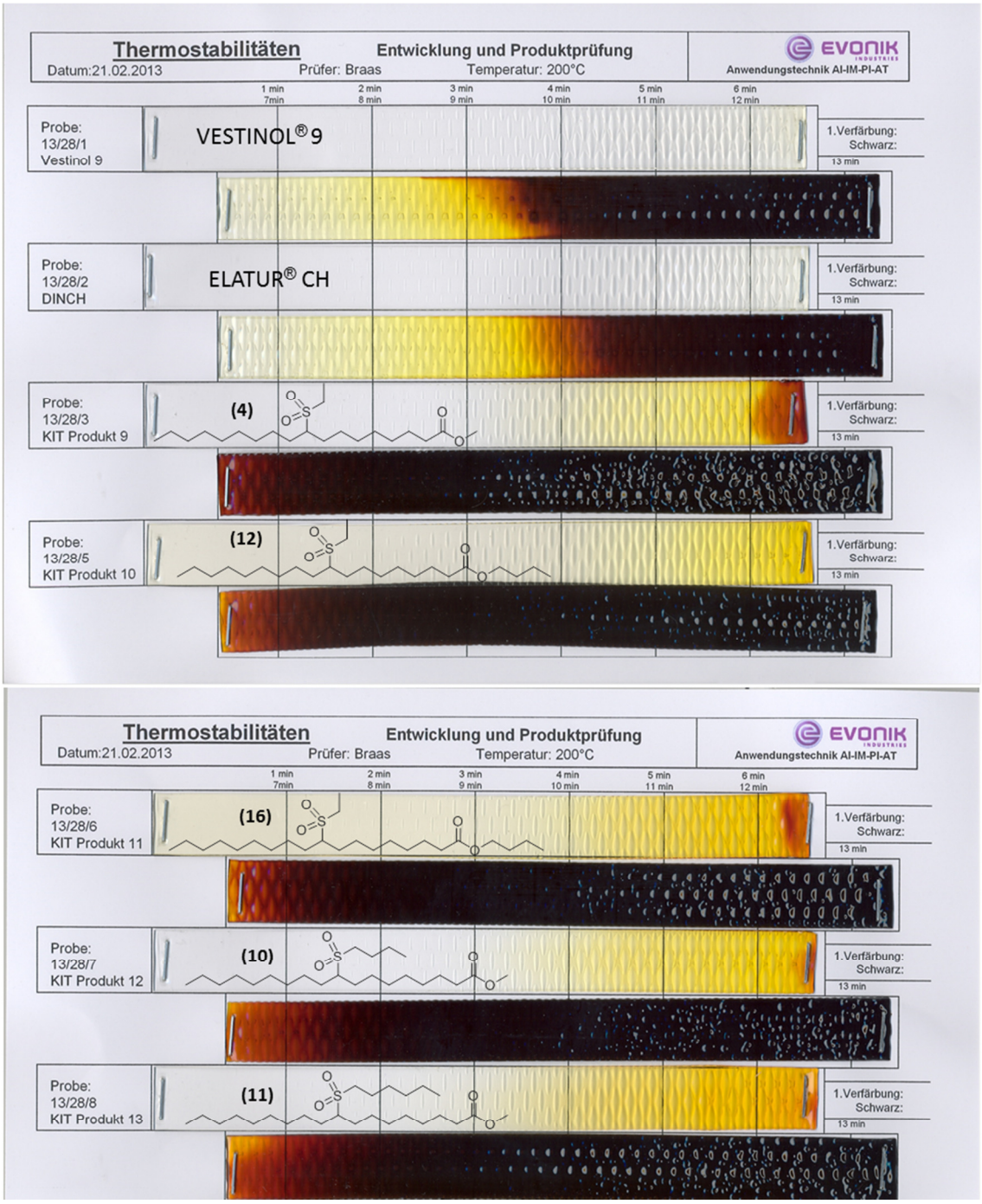

Figure S3. Thermal stability tests performed at 200 ºC. Evolution of thermal degradation at different residence times in the oven.

3. DSC graphs of fatty acid-based plasticizers

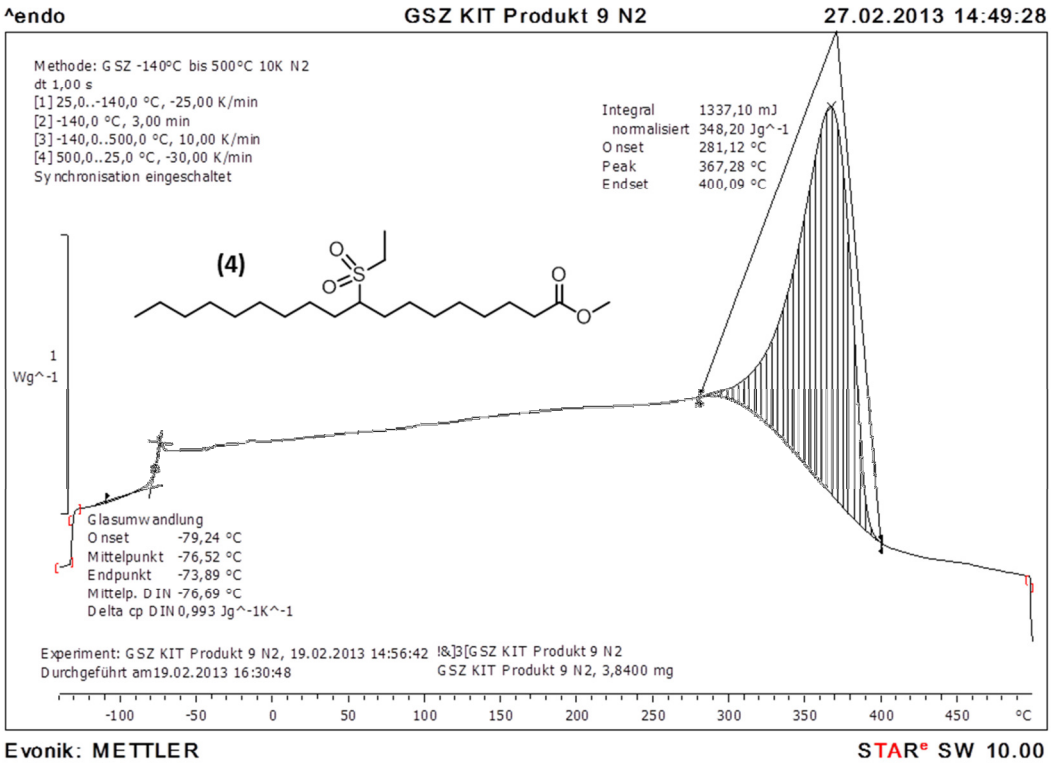

Figure S4. DSC trace of plasticizer **4**. Heating scan from -140 ºC to 500 ºC at a heating rate of 10 ºC/min under N_2.

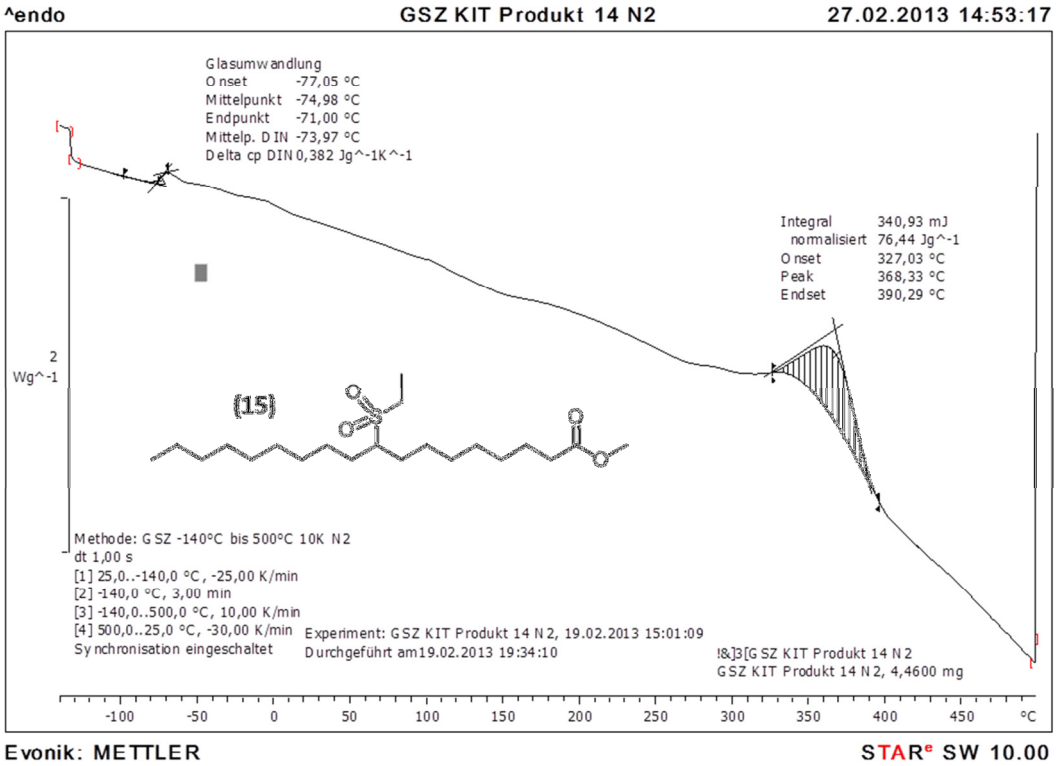

Figure S5. DSC trace of plasticizer **16**. Heating scan from -140 ºC to 500 ºC at a heating rate of 10 ºC/min under N_2.

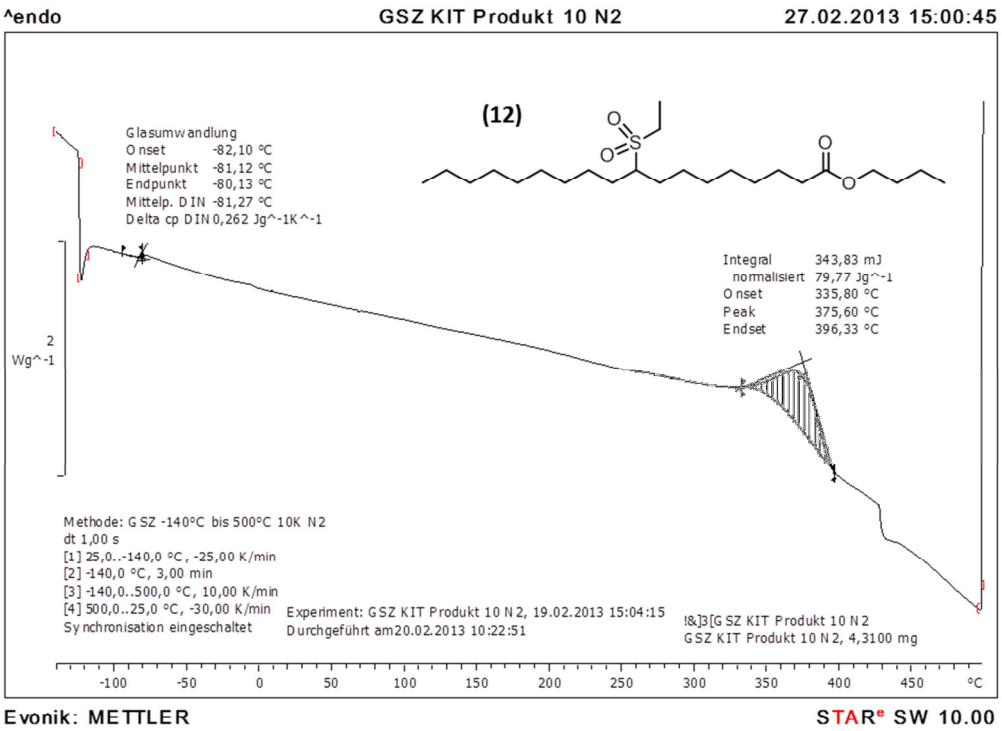

Figure S6. DSC trace of plasticizer **12**. Heating scan from -140 ºC to 500 ºC at a heating rate of 10 ºC/min under N_2.

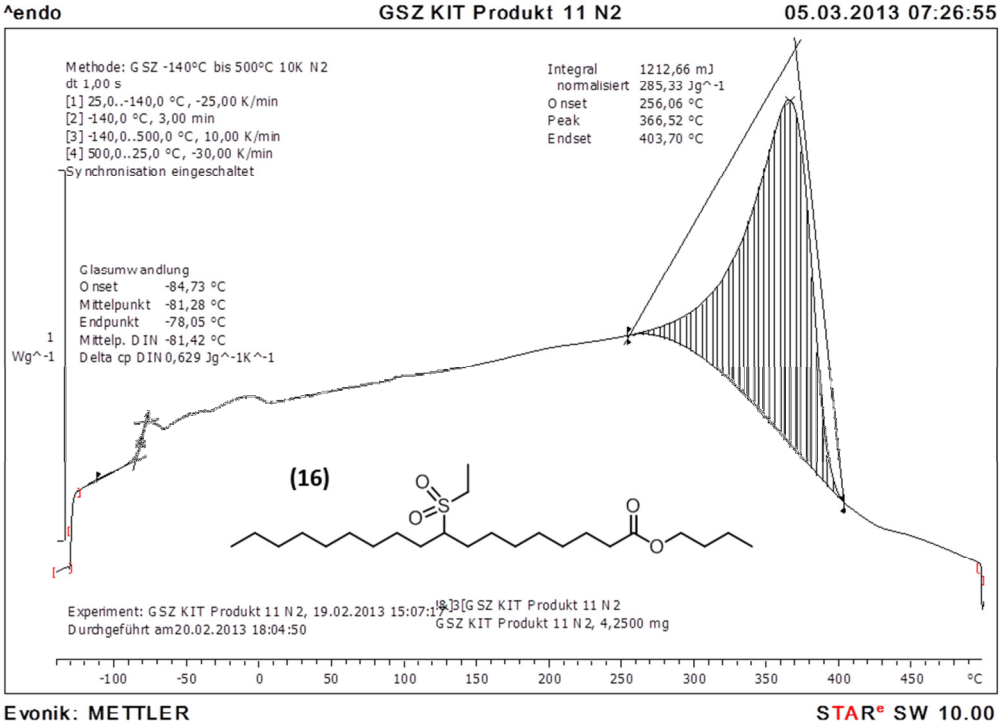

Figure S7. DSC trace of plasticizer **17**. Heating scan from -140 ºC to 500 ºC at a heating rate of 10 ºC/min under N_2.

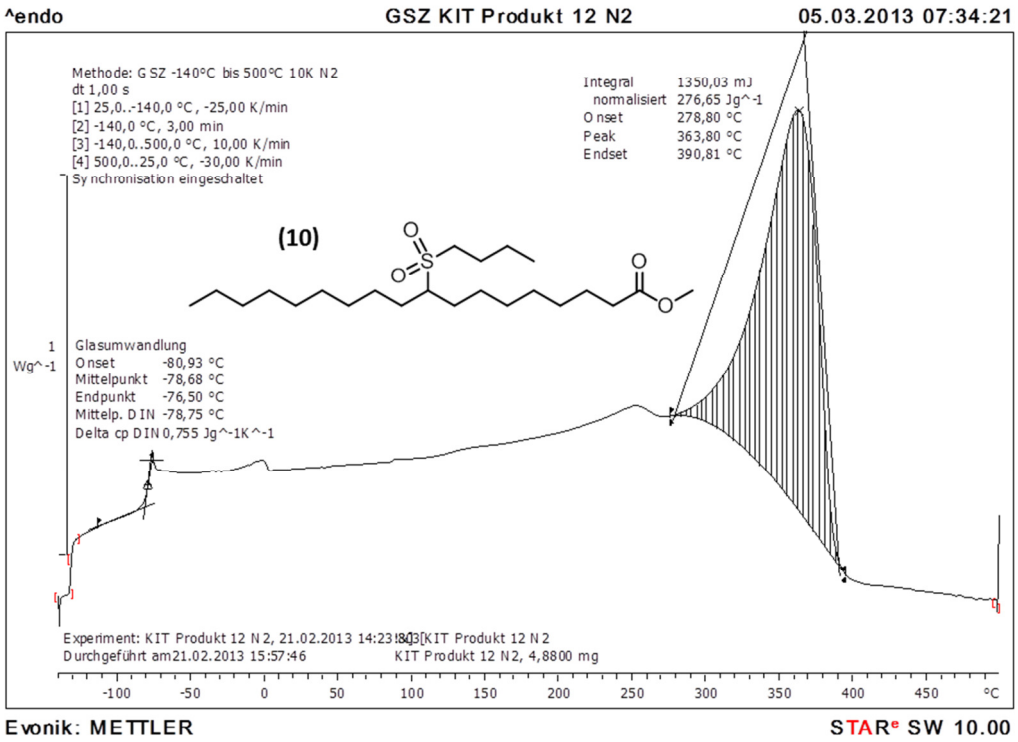

Figure S8. DSC trace of plasticizer **10**. Heating scan from -140 ºC to 500 ºC at a heating rate of 10 ºC/min under N_2.

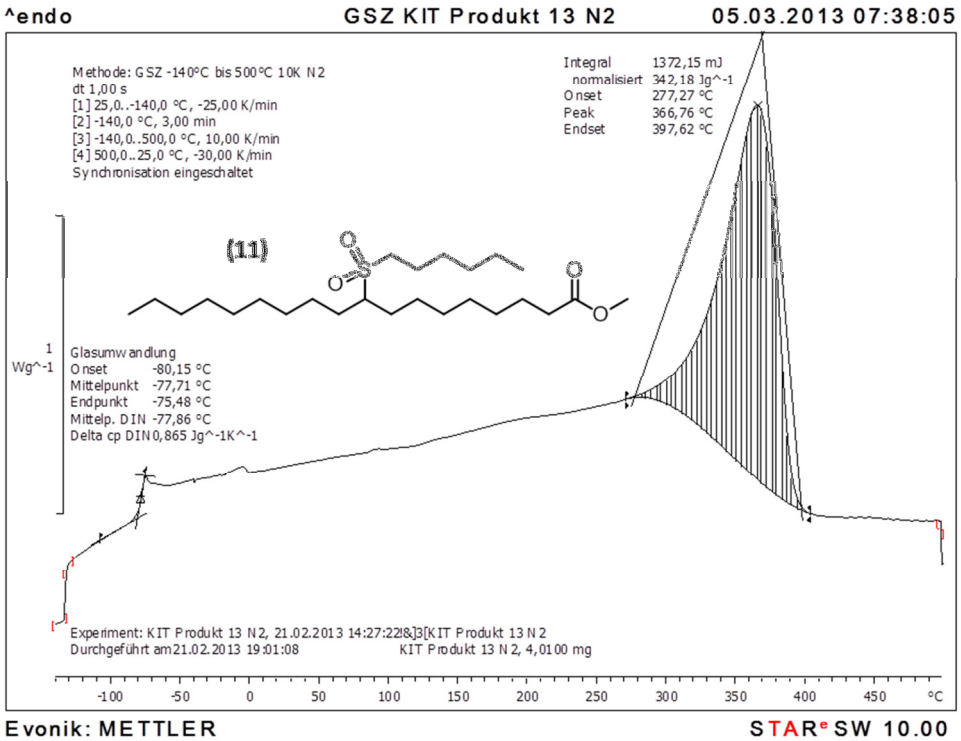

Figure S9. DSC trace of plasticizer **11**. Heating scan from -140 ºC to 500 ºC at a heating rate of 10 ºC/min under N_2.