

# Recyclable High Performance Epoxy Based on Transesterification Reaction

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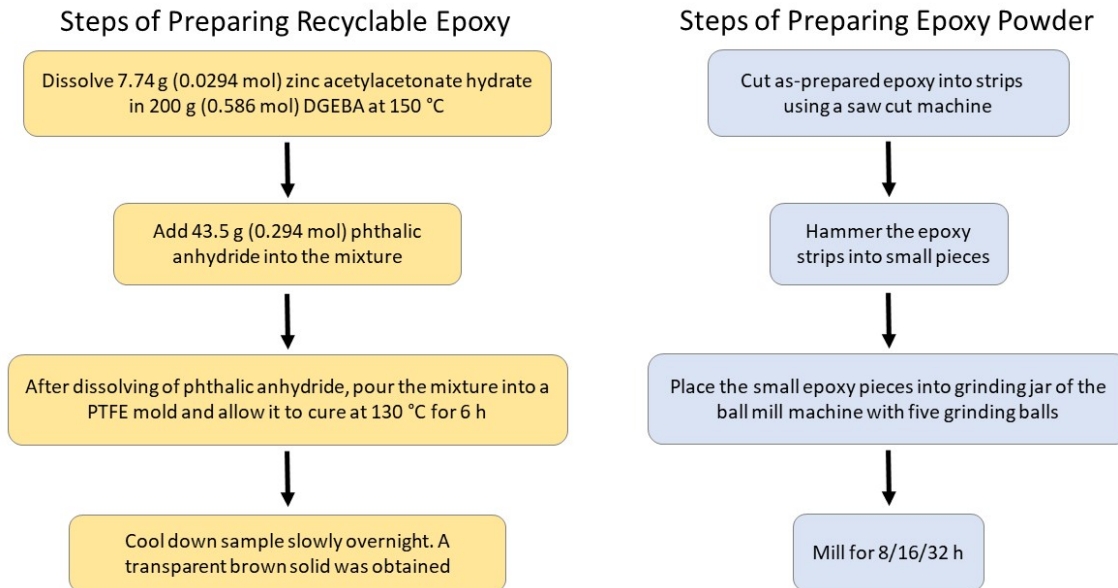


Figure S1. Flowchart of the recyclable epoxy and its powder form preparation process.

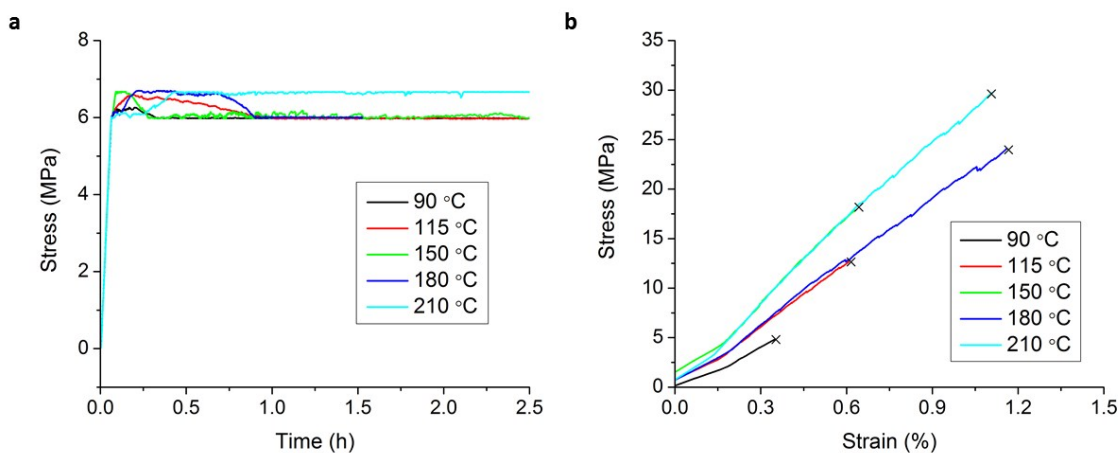


Figure S2. (a) Compressive load change with time during the healing process and (b) tensile stress-strain curves of healed specimens prepared at five different healing (recycling) temperatures.

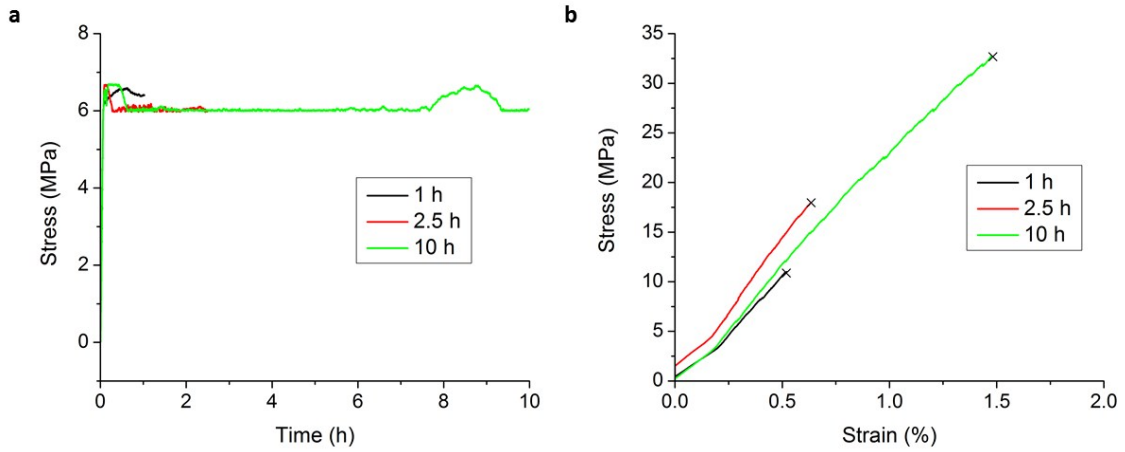


Figure S3. (a) Compressive load change with time during the healing process and (b) tensile stress-strain curves of healed specimens prepared at three different healing (recycling) durations.

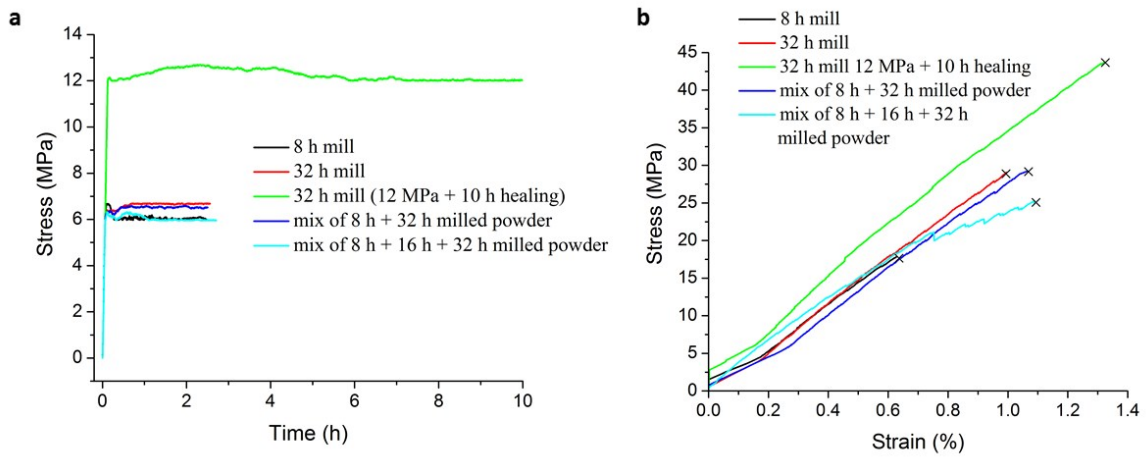


Figure S4. (a) Compressive load change with time during the healing process and (b) tensile stress-strain curves of healed specimens prepared with powders milled at different milling times or mixture of powders.

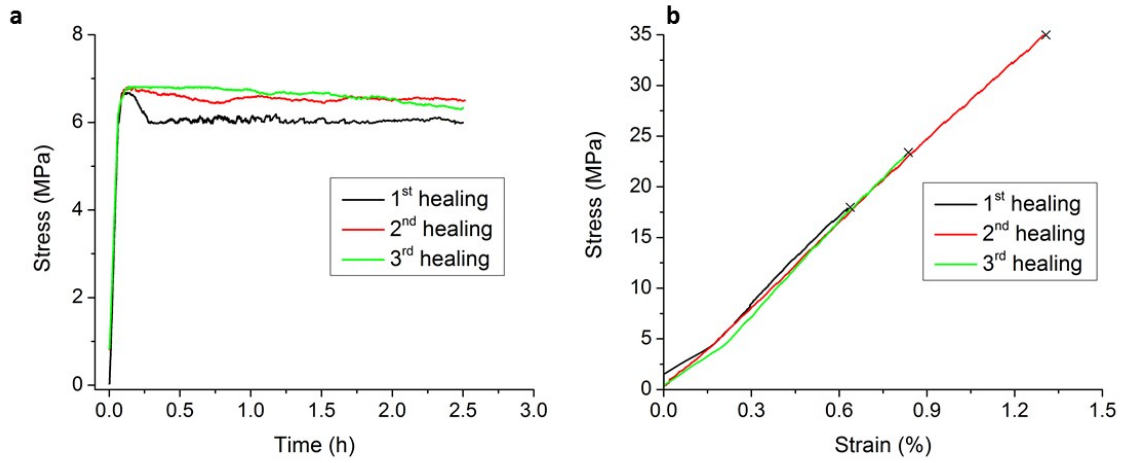
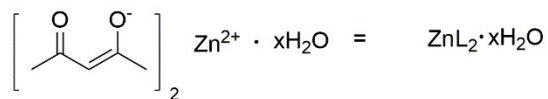
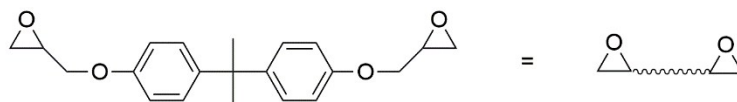
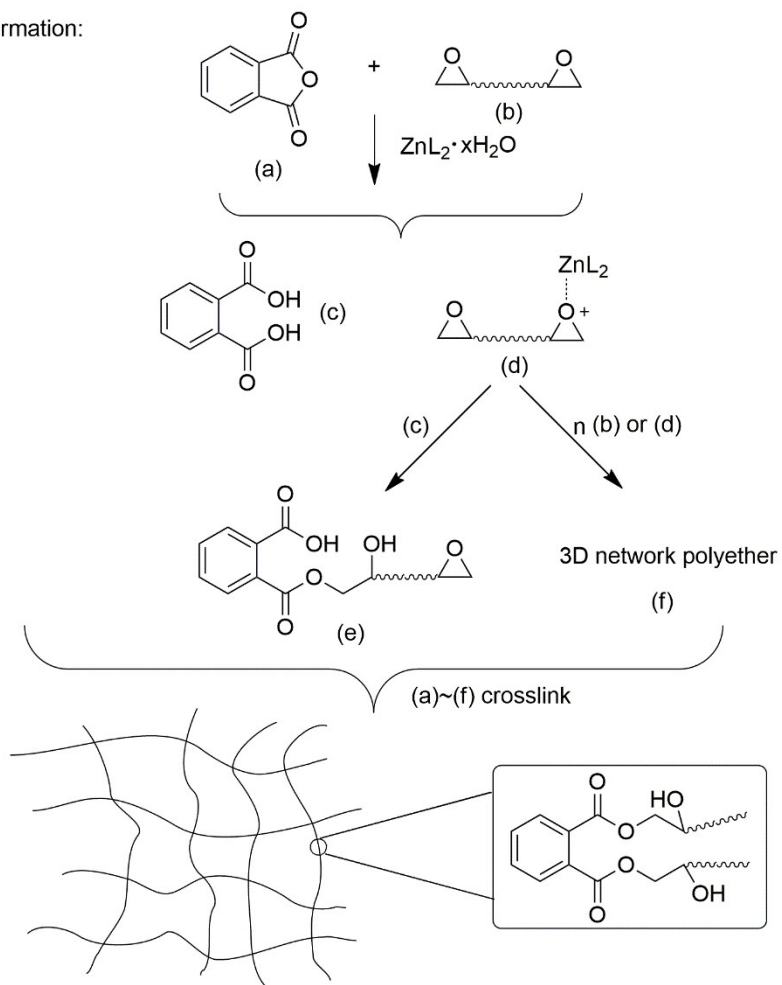


Figure S5. (a) Compressive load change with time during the healing process and (b) tensile stress-strain curves of healed specimens prepared after different healing (recycling) cycles.

Reagents:



3D network formation:



Self-healing via transesterification

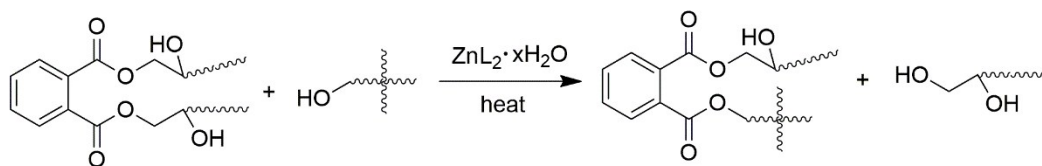


Figure S6. Chemical details of the synthesis and self-healing (recycling) process.