

**Table S6.** Mechanical properties of neat EP and EP composites.

| Sample       | Tensile strength (MPa) | Tensile modulus (MPa) | Tensile toughness (MJ m <sup>-3</sup> ) | Flexural strength (MPa) | Flexural Modulus (MPa) | flexural Toughness (MJ m <sup>-3</sup> ) | Impact strength (kJ m <sup>-2</sup> ) |
|--------------|------------------------|-----------------------|---|-------------------------|------------------------|--|---------------------------------------|
| Neat EP      | 46.6±2.12              | 2701±109              | 0.403±0.0658                            | 69.05±1.23              | 2.71±0.07              | 1.05±0.075                               | 7.34±0.70                             |
| EP/10%PA-DAD | 54.9±1.65              | 2498±191              | 2.280±0.130                             | 86.99±2.02              | 2.68±0.18              | 2.92±0.290                               | 14.61±4.30                            |
| EP/20%PA-DAD | 37.6±2.23              | 2491±122              | 0.565±0.087                             | 68.58±3.74              | 2.74±0.10              | 1.55±0.239                               | 13.00±3.29                            |
| EP/25%PA-DAD | 34.0±1.27              | 2468±156              | 0.474±0.043                             | 61.93±2.22              | 2.91±0.08              | 1.21±0.100                               | 8.53±1.70                             |