

Supporting Information

## **Graphene Nanosheets Deposited on Polyurethane Films by Self-Assembly for Preparing Transparent, Conductive Films**

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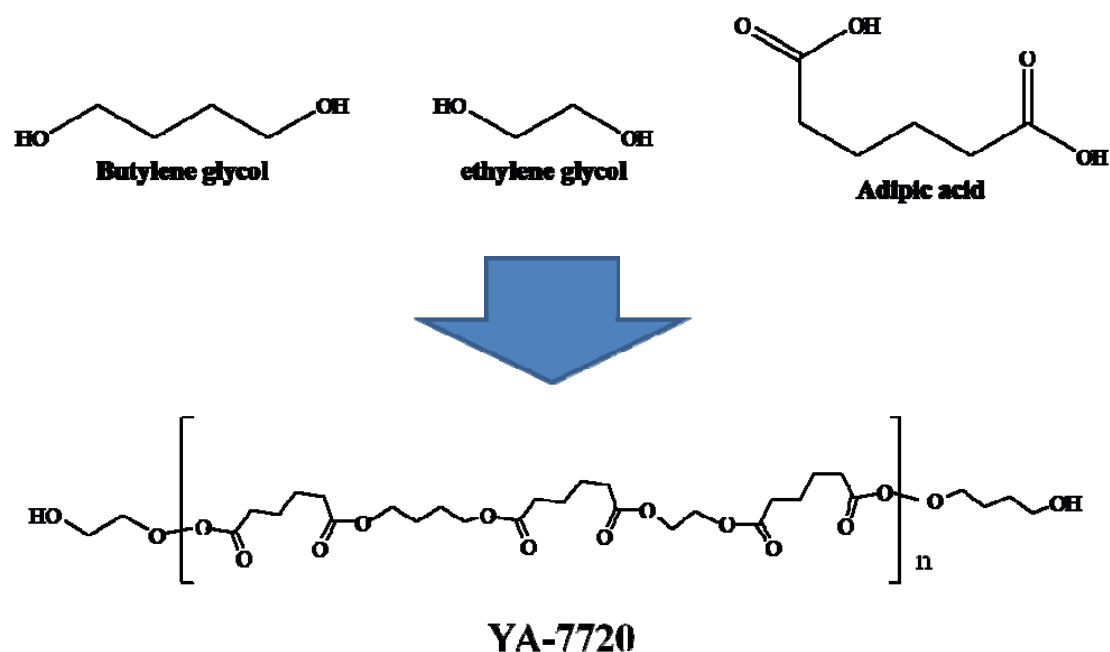
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### The structure of YA-7720

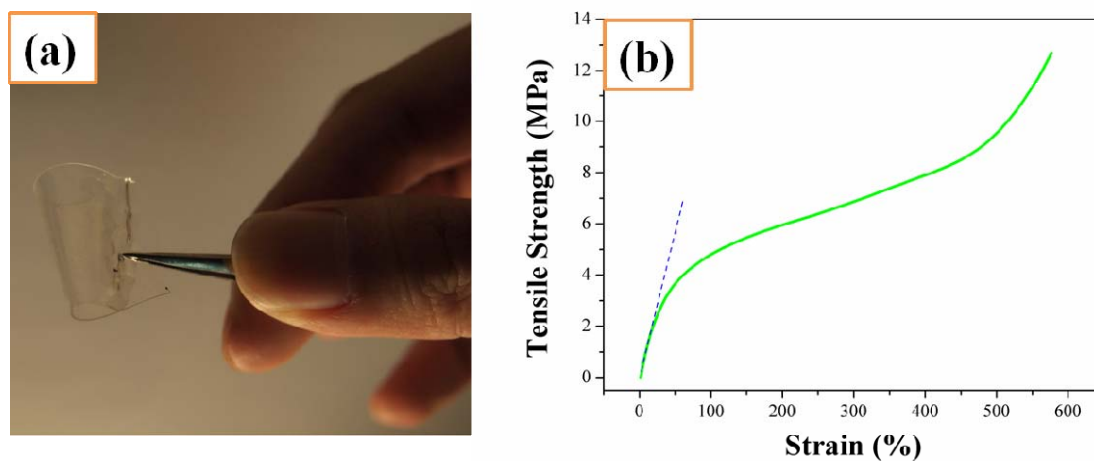
Figure S1 shows the structure of YA-7720. This chemical material can be obtained by polymerization of butylene glycol, ethylene glycol and adipic acid.



**Figure S1.** The structure of YA-7720 was a precursor of polyurethane.

### The mechanical property of the WPU film

The picture shows flexible property of the WPU film, as shown in Figure S2(a). The material of substrate (WPU) in this work possesses the flexible property, which is not upon break. The mechanical property of the WPU film was shown in Figure S2(b). The results were also summarized in Table S1. The WPU film with good strength and high toughness, it is accepted and suited as a substrate for use in TCFs.



**Figure S2.** (a) The WPU film shows flexible property. (b) The curve shows the mechanical property of the WPU film.

**Table S1.** The mechanical data of the WPU film

Material	Strength (MPa) at break point	Strain (%) at break point	Modulus (GPa)
WPU	12.69	576.66	1.065