

ABSTRACT

Disclosed are a graphene insole and a preparation method therefor, and raw materials for preparing the graphene insole comprises the following components in parts by weight: 24-30 parts of polyester polyol, 20-26 parts of polyether polyol, 30-40 parts of diisocyanate, 0.5-1.5 parts of glycerol, 1-7 parts of an other chain extender, 1-5 parts of graphene, 1-3 parts of water, 0.1-2 parts of silicone oil, 0.2-1 parts of an amine additive and 0.5-1.5 parts of diatomaceous earth. In the present application, the graphene insole can emit far-infrared radiation, which induces active hyperemia in blood vessels, boosts metabolism and improves blood fluidity, enhancing blood circulation in the feet, thereby improving the human immune function, and the graphene insole can inhibit the growth of *Escherichia coli*, and has the properties of antibacterial activity, deodorization, antistatic function, heat preservation and ultraviolet resistance; the graphene insole also has excellent air permeability, water absorbency, and water desorption capability, which meet the requirements of foot protection and safety footwear; moreover, the cost of the graphene insole is low.

Fig. 1