Modern nanotechnology can produce metallic or non-metallic particles of nanometer dimensions that have unique optical, mechanical, magnetic, electrical, and thermal properties. The purpose of this review is to summarise important published articles on the enhancement of convection heat transfer using nanoparticles dispersed in Ethylene Glycol (EG) and the effects on thermal properties and applications. This paper reviews all the articles relevant to nanoparticles suspended in EG. The studies of thermal properties including experimental measurement and correlations are reported. The effects of nanofluid volume fraction, temperature, and base fluid have been included. The stability of nanofluid was shown through testing to avoid agglomeration and clusters for many applications. In this paper, the applications of nanofluids in different types of heat exchangers, cooling systems, and solar energies are reviewed. In the field of economics, nanotech reduces manufacturing costs as a result of using a low-temperature process. In order to focus future studies of nanofluid applications, the articles on this field are summarized.