

Abstract

A high wear-resistant nylon composite material for rollers of an airport freight vehicle and a preparation method thereof are disclosed. The composite material includes the following materials as the main components, 60-80 wt% of nylon 6 or nylon 66 or a mixture of nylon 6 and nylon 66, 5-13 wt% of glass beads, 6-14 wt% of glass fiber powder, 5-7 wt% of lubricating anti-wear agent. The composite material further includes the following materials as the auxiliary materials, 3-5 wt% of graft type toughening modifying agent, 0.3-1 wt% of antioxidant, 0.2-0.3 wt% of lubricating dispersant and 0.2-0.5 wt% of nucleating agent. The composite has characteristics such as high wear resistance, high heat resistance, relatively high toughness and skid resistance.