

Abstract

Liquid polybutadiene, and a preparation method therefor and an application thereof. The liquid polybutadiene has a number-average molecular weight of 2,500-5,500, and a molecular weight distribution index of 1-1.2; based on the total amount of the liquid polybutadiene, the content of a 1,2-structural unit in the liquid polybutadiene is 85-95 wt%, the content of a 1,4-structural unit in the liquid polybutadiene is 5-15 wt%, and the molar ratio of a cis-1,4-structural unit to a trans-1,4-structural unit in the liquid polybutadiene is 1-2 : 1; and the dynamic viscosity of the liquid polybutadiene at 45°C is 100-500P. The liquid polybutadiene has good flowability, good film formability, and good coating performance, and a formed coating has an improved adhesion force to a substrate.