A spin coating device for a substrate, in which a uniform thin film can be formed by applying an application liquid to a substrate and the quality of the substrate can be further improved. The spin coating device for a substrate comprises a turntable for holding and rotating a substrate; an application liquid supply means for supplying an application liquid to the rotating substrate; a splash preventing means, which are arranged at the periphery of the substrate held by the turntable, prevent the droplets of the application liquid from splashing and provide with an opening portion for circulating the flow of external air in an area ranging from the central portion toward the peripheral portion of the substrate held by the turntable. Exhaust means and for exhausting air from within the splash preventing means are provided.

18 Claims, 3 Drawing Sheets