ABSTRACT

It is an object of the present invention to provide a surface protective sheet and a method for grinding a semiconductor wafer, by the use of which any dimple is not formed, nor occurs breakage and fouling of a wafer even when a wafer having high bumps which are highly densely arranged is ground to an extremely small thickness, and besides, no adhesive is left at the roots of the bumps after the surface protective sheet is peeled. The surface protective sheet of the invention is used for grinding a back surface of a semiconductor wafer, and in the surface protective sheet, one surface of a base sheet is provided with an opening portion having a diameter smaller than an outer diameter of a semiconductor wafer to be stuck, on said opening portion no adhesive layer being formed, and a portion which is provided around the opening portion and on which an adhesive layer is formed.