COVID-19 Face Shield

There is a huge shortage of Personal Protective Equipment (PPE) to health care professionals and public servants while COVID-19 cases continue to grow. The volume of PPE needed to keep doctors, nurses and patients safe in this crisis is daunting. As a result, we have designed a 100% recyclable disposable PETG face shield which is a cost effective, mass producible solution which can be provided to doctors as well as patients as well as to unaffected people who cannot afford PPE.

The following diagram shows how this PETG sheet will be folded (denoted by red lines) and clasped down at places to act as a face shield. The mask layout is fit in an area of 70cm x 45cm. PETG sheets (nominally 0.5mm thick) available locally, are noticed to be rolls having 70cm width which ensures production with minimal waste of resources. The sheet can be cut using Laser cutting or Die cutting; Latter having the ability of producing these masks very rapidly. (Around 20,000 masks/day) Using just one raw material and one machine! Also shown are how different parts of the mask will cover the entirety of a human face and its periphery.

