

**PROCESSING OF ILLITE POWDER IN BIDOR, PERAK:
A STUDY OF THE PROCESS AND THE POTENTIAL
USES OF ILLITE CLAY**

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The wet process used by one of the two local plants in processing illite is described here. The crude clay after being mixed in the agitation tank is passed through the sedimentation tanks, trommel, sluice box and the vibration screen to remove the coarse materials. The refined slurry is pumped into the filter press. The wet cake from the filter press is then air dried, pulverized, bagged and ready for sale.

The product contains mainly illite with very small amount of kaolin, quartz and montmorillonite. It contains more than 8 percent of K_2O and 2 percent of MgO and shows good fluxing properties as indicated by the firing test. However the product has comparatively low brightness.

The product under study is mostly exported to Japan. It is mainly used for the coating of welding rods because of its fluxing properties. It may also be used in the manufacture of white-filled mixes, sponge rubber and latex foam. Previous investigation has shown that the use of illite in these rubber products have certain advantages over other fillers. There is also the possibility of using it in the ceramic industry as a partial substitute for feldspar. Illite can also be used as a base for certain cosmetic products. Unfortunately the illite under discussion was found to be less favourable because of its high iron content.