

Particle size distribution of wood dust in Rubberwood furniture manufacturing

ABSTRACT

The study evaluated the concentration and particle size distribution of air-borne wood dust in the Rubberwood furniture manufacturing industry. Air quality samples were measured at routing and hand-sanding work stations in furniture factories using the micro-orifice uniform deposit impactor (MOUDI) air-quality measuring instrument. It was found that less than 25% of the air-borne wood dust particles at the two work stations were less than 10 μm in size, which in turn did not pose major respiratory health hazards. However, the high wood dust concentrations at the two work stations is a matter of concern, and efforts must be taken to minimize the air-borne wood dust exposure levels workers are subjected to in the rubberwood furniture manufacturing industry.

Keyword: Size distribution; Wood dust; Rubberwood; Furniture manufacturing