VOLUME 32, NUMBER 1

January, 1971

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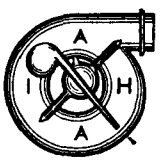
American Industrial Hygiene Association Journal



American Industrial Hygiene Conference
Royal York Hotel, Toronto, Canada
May 24-28, 1971

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Received March 20, [illegible]

Polychlorinated Biphenyls (PCB)

The Paperboard Packaging Industry and the Chemical Industry have been aware of the polychlorinated biphenyls (PCB) problem and have been working toward its solution for over a year. The use of PCB in a variety of industrial products accounts for its presence at some levels, virtually everywhere. Even though toxicity levels of PCB have not been determined, paperboard packaging companies have been measuring PCB levels in their recycled paperboards, and have instituted production control programs to hold the levels to a minimum in paperboards for food packaging applications.

The manufacture and sale of PCB for use in other than totally closed systems (such as heat exchangers) was discontinued over a year ago. This action was taken voluntarily by the sole PCB manufacturer as soon as it was found that high concentrations of PCB might cause a public health problem. The presence of varying levels of PCB in recycled paperboards has been traced to its former use in some office duplicating papers. This use has been discontinued since June 1, 1971. Though the problem is diminishing, measures are being maintained to monitor the PCB content in food packaging materials. The American Paper Institute Biological and Chemical Research Committee is cooperating with a task force representing six governmental agencies to better define the PCB problem and its possible implications to human health.

Influence of Filler
in Manua

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Charles University Med
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The rate of production electrodes for filler material hygienic significance of the f fume, manganese oxides were of fluorine were not adequ electrodes relative to their pot

COATED ELECTRODES are filler materials used in manu welding. The quality of air c tion by such welding depends or electrode used and, above a composition of the coating. The q contamination depends on r electrodes consumed in a given ti a function of the melting rate c odes and the amount of weld one. The current density used, t of the rod coating and other f may be involved.

The components of both the ore and the coating contribute ents to the fume produced. T ery fine particulate material ases. Figure 1 shows the fume 44.83 basic electrode and illus finely divided this particulate m The fume contains spherical par 0.2 μm to less than 0.05 μm in si Thus we are dealing with an aer can easily penetrate even to t parts of the respiratory tract. A c of the fume is water-soluble to ent, mainly as far as basic elec concerned. All of these conditio ute to an easy absorption of the components. The breathing in of itself has some deteriorating effe lung.