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SUBJECT MSDS: PCB's

REVISIONS

TO J.H. Craddock, G3WA

File
PCB3

Suggested minor changes have been made on the draft which is being returned. The following additional changes should be incorporated.

Emergency and First Aid Procedures

Add as Note to Physician under:

Skin - If hot PCB's are splashed on skin, thermal burns may be produced.

Inhalation - If electrical equipment arcs over, PCB's or other chlorinated hydrocarbons in the dielectric fluids may decompose to produce hydrochloric acid which is a respiratory irritant.

Add at End of this Section:

There are literature reports that PCB's can impair reproductive function in monkeys. Another published report states they cause cancer in rats, but a recent report from the National Cancer Institute stated the PCB AROCLOR 1254 was not carcinogenic under the conditions of their bioassay.

The consistent finding in animal studies with PCB's is that they produce liver injury following prolonged and repeated exposure by any route, if the exposure is of sufficient degree and duration. Liver injury is produced first, and by exposures that are greater than those causing reproductive effects and that alleged to produce cancer in rodents. Therefore, exposure by all routes should be kept sufficiently low to prevent liver injury.

Two other comments should be noted.

1. Under Inhalation in Physiological Effects Summary, it is stated that 42% chlorinated material does not produce liver injury, but 54% chlorinated material does. That is based on 17 exposures, each of 7 hours duration, at 8.6 mg/m³. In

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light of studies done since then which show that PCB's invariably attack the liver, it is very probable that longer exposures by inhalation to the 42% chlorinated material would produce liver injury. As a result, the statement on the draft MSDS could be misleading today, even though it was true when written and is still valid for relatively short-term exposures. Therefore, the following statement is proposed.

Inhalation:

Animal experiments of varying duration and at different air concentrations show that for similar exposure conditions, the 54% chlorinated material produces more liver injury than the 42% chlorinated material.

2. Contaminated clothing is treated differently under Occupational Control Procedures (Skin Contact) and Spill, Leak & Disposal Information. The former says "launder before reuse". The latter (item 6) says "disposed of in the manner prescribed by EPA". Which procedure is to be followed? Laundering will result in a PCB discharge to some waterway.



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alw

enclosure

MONS 002360