If PVC's a hazard, big changes lie ahead

THE FUTURE of a major plastic material may hinge on a delicate understanding of the difference between a monomer and a polymer. If that difference is clearly understood by government rulemakers and consumers, polyvinyl chloride (PVC) will stay with us.

If that difference is missed, PVC will be in serious trouble.

Early this year, reports began to trickle in that vinyl chloride monomer (VCM) might cause

ists Assn. (MCA) has announced that lab tests show that VCM can indeed cause liver cancer in mice at several exposure levels. In the MCA-sponsored tests at Industrial Bio-Test Laboratories Inc., exposure to as little as 50 ppm produced liver cancer in the mice. How this relates to humans is far from clear.

The results are called preliminary, but MCA immediately notified OSHA, the National Institute for Occupational Safety & Health, and the Environmental Protection Agency (EPA) of the results.

VCM is the basic building block for PVC and it is only the monomer that has been found to cause cancer. Basically, it is PVC that finds its way to industrial and private consumers. Thus, the only ones who are actually exposed to VCM are those workers in plants using that material to produce PVC.

PVC is found in a wide range of items, from shoesoles to films for packaging everything from food to hardware. The Food & Drug Administration is supposedly looking into the safety of PVC's use in connection with food items. FDA has not been heard from as yet.

One other place where VCM could be a danger, it's now thought, is its use as an aerosol propellant in some hairsprays and pesticide products. EPA asked for a recall of those products under its jurisdiction, and the Consumer Product Safety Cor. ission is trying to determ....e what, if any, aerosol products containing VCM are under its jurisdiction.

Meanwhile, the United Rubber Workers is claiming that there is no known safe-exposure level for VCM. This is where the confusion can begin, and possibly lead to the demise of PVC.

It is natural to find small amounts of unreacted monomer in any polymer. So, chemical analysis should find small amounts of VCM in any sample of PVC. Indeed, this is the case. But, it this a potential danger? Most observers say no.

However, a small portion of the VCM in PVC can be leached out. For example, some liquor packaged in PVC bottles was found to contain a minute amount of VCM which had leached into the liquor. Can this be a danger? Again, most say it can't, and in fact it is nearly impossible to detect the leached VCM with today's analytical techniques.

But strong pressure from unions and consumer groups could affect the outcome. If it is decided that PVC itself is a hazard, changes in many products could lie ahead.

The next move appears to be up to the regulatory agencies involved, with OSHA considered the most likely to take action. □

Du Pont workers are target in USWA organizing effort

THE UNITED Steelworkers of America (USWA), already the

An "exhaustive effort" to measure the extent of that inter-

ers of independent unions.

figure is 0.3 of a point.

May 7, 1974

I have been saying this to all who will listen, internally and externally, but have sort of felt like a voice in the wilderness.

P. H. Lawrence

cc: E. W. Harrington - J. L. Nelson
G. D. Schaaf-R.J.Coffey-T.R.Linak-E.R. Clayson
P. J. Weaver
J. F. Malone - W. S. Lodge
~~K. O. Pow~~ - W. J. Wilcox
W. E. Brodine, et all
R. W. Walker - R. D. Savage
Drs. M. N. Johnson - R. A. Guyton
Dr. J. L. Creech

2416 4001