

M E M O R A N D U M

Re: Polyvinyl Chloride Plastics and
Vinyl Chloride Monomer Problem

In light of information which has recently reached us, on behalf of The Society of the Plastics Industry, Inc., we are deeply concerned about the type of regulatory approach we understand may now be under consideration relative to polyvinyl chloride plastics food packaging materials. We are fearful that some of the salient facts are not clearly understood and that, unless they are fully taken into account, the plastics industry will be severely adversely affected without any concomitant benefit to the public health, safety or general interest.

Ever since October 11, 1968, when SPI's Comments were submitted in response to the Food and Drug Administration's first proposed rulemaking on polyvinyl chloride and its prior sanctioned status, we have advocated that the prior sanction be reaffirmed but the regulations be spelled out for the first time to assure there will be no vinyl monomer (which is not prior sanctioned) in the food supply.

We continue to urge FDA to adopt this approach and recommend strongly that the following concepts be considered favorably and employed appropriately in the redrafting of rulemaking which we now understand is taking place:

1. In our view, one of the most important things the Food and Drug Administration can and should do in dealing with this problem is to employ the Preamble of any proposal to explain carefully that, while vinyl monomer may be a carcinogen */ and is not the subject of a prior sanction as the same is defined in the Food Additives Amendment of 1958, polyvinyl chloride is an

*/ It is conceded that vinyl monomer, a highly volatile gas at room temperature, is a carcinogen when inhaled in high doses over long periods of time. There is no conclusive data to indicate that the same is true as regards ingestion of vinyl monomer; it may not, therefore, be dealt with as having been found to induce cancer after tests "appropriate for the evaluation of the safety of food additives."

entirely different material in the same way that toxic chlorine is not sodium chloride (table salt). Polyvinyl chloride is inert, has been the subject of extensive feeding tests which have shown it to be harmless when ingested and, hence, is very properly the subject of prior sanction under the Food Additive Amendment.

2. It is our position that the prior sanction should be reaffirmed even though it could be considered that it need not be the subject of prior sanction since prior sanctioned substances are exempt from coverage of the Food Additive Amendment. In light of the fact that there has been no evidence of harm caused by polyvinyl chloride, and since its very nature is such as to result in a combustion product which is vinyl monomer, we would like to see that the reaffirmation of the prior sanction of polyvinyl chloride is made while the industry is being counted upon to support the regulation rather than contest FDA findings. This score, providing an incentive imposed in the process of reaffirmation, be appropriately designed to make it clear that the presence of vinyl monomer will not be tolerated.

With these considerations foremost, it is our urgent recommendation that a prior sanction reaffirmation regulation be proposed and that it (1) indicate that all forms of polyvinyl chloride, in any form or processing equipment are covered by prior sanction and safe provided there is no detectable monomer, and (2) that a suitable method for analyzing extractability be included in such a reaffirmation regulation. With regard to

the method published, it is obviously
be one that has been satisfactorily
validated and will be reliable for
practical day-to-day application. We
believe that the Food and Drug Adminis-
tration's Staff has developed such a
method which can be used in a
reaffirmation procedure.

It should be emphasized that
any analytical procedure has a finite
detection limit. If the extraction test
any possibility of detection with
this exaggerated exposure is de-
tected, one is not relying on the
detection sensitivity of the test
of the test but rather on the
exposure test assurance. There is no
reasonable expectation of detection
under actual intended conditions of use.
Such considerations exist in the
SPR recommendations in 1973 "Comments".

In the course of the
proposal of the type described above,
if the Food and Drug Administration
deems it advisable or desirable, it
might wish to note that the test is
coincidentally responsive to the so-
called HRC reaction in the extraction
will assure that no vinyl chloride
monomer enters the food. More-
over, it might be noted that the
limitations the Food and Drug Ad-
ministration would be imposing would be
far more severe than those already
already been imposed by the Occupational
Safety and Health Administration (OSHA)
in circumstances where exposure to vinyl
chloride monomer is not a conceptual
possibility, but is an absolute
certainty. The OSHA Vinyl Chloride Standard
permits worker exposure of 1 part
per million over an eight-hour day for

every working day. This is roughly equivalent to permitting 10 ppm of vinyl chloride in the total diet to be ingested daily, if such were possible, which it is obviously not. It is also interesting to note that the Health Research Group participated fully in the OSHA proceedings which led to the adoption of its Standard. HRC did not appeal the OSHA decision as industry did. In fact, HRC spokesmen were believed to have been expressing the opinion that a significant victory had been attained in large part at their instance, in this case.

It would appear to us that the Food and Drug Administration should move in accordance with the principles outlined above and utilize such of them as is provided in whatever way it deems fit. There are several motivating or otherwise tangentially related factors which we feel compelled to draw to your attention:

1. The uncertainty of the status of polyvinyl chloride as a contact material, and the confusion it with vinyl monomer, has already created unnecessary and very real concern in the minds of the public and the food processor customers of the plastics industry. Any formal proceeding which, though recognized as only a step, adds to the unfavorable climate will undoubtedly cause grossly unjustifiable damage vis-a-vis the public's sense of security about the food supply.

2. It is generally known that the industry is now supplying polyvinyl chloride resins and compounds to its processors which differ very significantly from the materials that were in the marketplace at the time the HRC referenced extraction data was submitted. The availability and use of

these new materials can be documented. Use of them will assure there can be no reasonable expectation that polyvinyl chloride packaging materials will lead to vinyl monomer becoming a component of foods, or will be ingested.

We believe that many leading resin and compound supplying companies have already advised the Food and Drug Administration on an individual basis as to the changes that have been made in their food packaging grade products to provide this type of assurance. If more data is needed, however, we can ask that it be supplied and would urge that the Food and Drug Administration receive the same before it takes any precipitous action that might injure the industry's reputation irreparably.

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