

The BFGoodrich Company
Geon Vinyl Division
6100 Oak Tree Boulevard
Cleveland, Ohio 44131
216-447-6000

W. H. H. 59
Robert K. Hinderer, Ph.D.
Director, Health, Toxicology
and Product Safety

October 8, 1992

Jim Lowrie
Safety Manager
Sola Optical
1500 Cader Lane
Petaluma, Ca. 94953

Dear Mr. Lowrie:

This letter is in response to your request for comments on the letter from Dr. Patricia Bailey regarding the hazards of exposure to Geon 86416.

The hazards of Geon 86416 are described in the Material Safety Data Sheet (MSDS) for this product. Although you indicated that you have a copy of this MSDS, a second copy is enclosed for your convenience.

As you know, Geon 86416 is a mixture of polyvinyl chloride (PVC) and a number of other ingredients which are added to impart specific functional characteristics. PVC, which is the prime ingredient in this compound, is known to release hydrogen chloride (HCl) when excessive temperatures occur during processing. Under these conditions HCl can cause irritation to the eyes, nose and upper respiratory tract. Studies in nonhuman primates have shown that as the result of its high solubility in water and scrubbing action of the upper respiratory tract (moisture) no significant penetration to the lower lung or lung function effects are expected. Furthermore, Geon 86416 does not contain any ingredients which can generate hydrogen cyanide.

All of the hazardous ingredients are listed under Section II of the MSDS. PVC contains a small residual amount of vinyl chloride, the basic building block, which is a known human carcinogen. However, the residual levels of VCM have been reduced to the point where they are not expected to pose any significant risk. DEHP, also called DOP or bis(2-ethylhexyl)phthalate, has not been shown to be carcinogenic in man. Long-term studies have shown that DEHP is carcinogenic in rodents and have led some organizations to list this chemical as a possible human carcinogen. However, further studies of this carcinogenic response in rodents have indicated that this response is an artifact specific to the animal species tested and not a true indication of human hazard. This has led bodies like the Specialized Experts Working Group of the European Community to conclude that there is no evidence to warrant classification of DEHP as a carcinogen. The U.S. FDA also has not regulated DEHP as a

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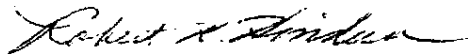
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carcinogen not only because of questions about the relevance of the rodent response, but because of the long history of use in medical devices and as an indirect food additive. Moreover, senior officials for the Environmental Protection Agency have taken the position that the process of tumor formation in the rodent may not be relevant to man.

Please call me at (216) 447-7978 if you have any further questions.

Sincerely,

THE BFGOODRICH COMPANY



Robert K. Hinderer, Ph.D.
Director of Health, Toxicology, and Product Safety

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Attachment

cc: John Dresch
Don Knechtges
Mike Marshall (w/attachment)
Charlie Ragland

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