

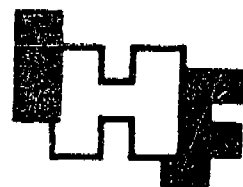
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LITERATURE
ABSTRACTS

ENVIRONMENTAL
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8/76

Du Pont Scientist Labels HMPA a Possible Carcinogen. Urges Caution.

K-10931
Laboratories employing hexamethylphosphoramide (HMPA) as a solvent have been advised to handle the chemical with caution appropriate for a potential carcinogen. In a letter to Science magazine published in the Oct. 31 issue, John A. Zapp, Jr., director, Haskell Laboratory for Toxicology and Industrial Medicine, E.I. du Pont de Nemours and Co., Wilmington, Del., indicated rats exposed to HMPA in a long-term inhalation toxicity study developed malignant nasal tumors that in some cases penetrated the brain. Using Charles River CD strain housed in rooms with laminar flow ventilation, and paying strict attention to sanitation, Du Pont began its experimentation in December 1974, with four groups of 120 male and 120 female rats each, exposed to, respectively, 0, 50, 400 and 4,000 parts per billion of HMPA six hours per day, five days per week. After six months, 18 animals in each group were killed, but showed no compound-related lesions, Zapp reported. By the eighth month, August 1975, some rats in the same two groups showed enlarged noses and experienced breathing difficulty. When killed, autopsies revealed squamous cell carcinoma in the nasal cavity, which in some cases filled the cavity and penetrated the brain. Tumors originated from the epithelial lining of the nasal turbinate bones, Zapp said. "The incidence was dose-related, 12 nasal tumors being found in 15 rats (out of 240 exposed) that died or were killed in the eighth month in the high-exposure group (4,000 ppb), as compared with seven tumors in eight animals (out of 240 exposed) that died or were killed in the mid-exposure group (400 ppb)," Zapp concluded. Of six rats randomly selected and killed from the low-dose group exposed to 50 ppb levels of HMPA, none showed any malignancy.

--Job Safety & Health Report 5: 212, November 3, 1975

9/76

Accreditation Group Formed for Occupational Health, Safety.

An accrediting commission, governed by eight leading professional societies, has been formed to play a significant role in helping industry understand and implement effective occupational health and safety programs. Called OHSAPAC--for the Occupational Health/Safety Programs Accreditation Commission--the non-profit group has begun contacting industrial companies and other organizations to make known its purpose and the benefits it offers through the accreditation process. OHSAPAC accreditation is based upon fulfilling criteria in five major concerns of occupational health and safety: medicine, nursing, industrial hygiene, health physics and the administration of these functions. The accreditation process reviews policies, organization, programs, regulatory compliance, facilities, equipment, diagnostic procedures, hazard prevention, emergency preparedness, record-keeping and many other operational, assessment and surveillance criteria. OHSAPAC represents a combined effort of the American Academy of Industrial Hygiene, American Academy of Occupational Medicine, American Association of Industrial Nurses, American Conference of Governmental Industrial Hygienists, American Industrial Hygiene Association, American Occupational Medical Association, American Society of Safety Engineers and Health Physics Society. Each of the member organizations has a commissioner on OHSAPAC's governing board. Accreditation policies are established by the commissioners. A special review committee of the commission makes final authorization of accreditation for industrial firms and other organizations participating in the program. Dr. Robert E. Eckardt, chairman of the commission, explained that OHSAPAC is designed to be an educational as much as an accrediting process. Companies seeking accreditation may wish to have all or part of their facilities approved. In any event, accreditation is approved on the basis of separate facilities or operations and not for the company as a whole. Dr. Eckardt said, "We, of course, can't guarantee that a plant which has gained accreditation will never be subject to a Federal violation under the Occupational Safety and Health Act, but generally we feel if it meets our requirements it will be living up to objectives as set forth by law." Headquarters staff includes William E. McCormick, executive director, and Larry D. Hyde, accreditation coordinator. Companies seeking accreditation should contact OHSAPAC headquarters, 66 S. Miller Road, Akron, Ohio 44313; (216) 864-8808. For an initial fee of \$100, the company will receive OHSAPAC's "Standards, Interpretations and Audit Criteria for Performance of Occupational Health Programs," and upon filling out the document criteria, the first steps will be taken. It is estimated that the entire process will cost a company between \$3,000 and \$5,000.

--Occupational Health & Safety Letter 5: 8, November 8, 1975

10/76

A Japanese National Safety Standard for Vinyl Chloride.

K-1711
A Japanese national safety standard for vinyl chloride may be issued by year's end. The Ministry of Health & Welfare already has set a provisional 2 ppm limit inside monomer plants. A belated stir over vinyl chloride safety has followed the provisional linking of a chemical worker's death from liver cancer last month in Nagoya to long-term exposure to the monomer. The government has since told polyvinyl chloride makers to arrange medical examinations for workers exposed to vinyl chloride.

--Chemical & Engineering News 53: 10, November 10, 1975