

MASTROMATTEO, E., FISHER, A. M., CHRISTIE, H. & DANZIGER, H. Acute Inhalation Toxicity of Vinyl Chloride to Laboratory Animals. *Amer. Indust. Hyg. Ass. J.* 1960, Oct., v. 21, No. 5, 394-8. [10 refs.]

K1711-(100)

After 2 accidental deaths in a plant engaged on polymerization of the gaseous monomer [this *Bulletin*, 1960, v. 35, 765] groups of 5 mice, 5 rats and 5 guineapigs were closely observed during exposure to 10, 20 or 30% vinyl chloride in air for 30 minutes. Guinea pigs, the most resistant, were exposed to 40% for 30 minutes; 1 died during exposure, 1 died later and 3 survived and took 30 minutes to recover from narcosis. At 10% irritation was followed by increased activity in 5 minutes, tremor and incoordination in 10, and in mice and rats narcosis in 25; on removal 1 guineapig was unconscious; the animals recovered in 5 minutes. At 20% narcosis developed in 15 minutes, and in mice and rats frothing at mouth and nostrils appeared in 25 minutes; 1 mouse then stopped breathing. At 30% these signs appeared in 5 minutes, mice stopped breathing in 10 and rats in 15 minutes; 1 guineapig died after removal within 24 hours. In the dead animals the principal changes were congestion in lungs, liver and kidneys and, from the higher concentrations, severe damage to tracheal epithelium and pulmonary oedema and haemorrhage. The liver of the guineapig which died after 30% showed severe fatty degeneration of the liver. The blood of animals which died during exposure had a tendency to remain unclotted. Minimal degeneration of renal tubular epithelium was noted in the mouse which died during 20% exposure and also in another which was killed, as were all survivors, 14 days after the exposures. Changes suggesting fatty infiltration of the liver in some animals were not confirmed in frozen section stained by Sudan III. Survivors showed little difference from controls except pulmonary congestion.

M. Patricia Fitzsimons

CRISMER, R., MIGNOLET, F., RONDIA, D. & HEUSGHEM, C. Toxicité des huiles inflammables. [Toxicity of Inflammable Oils] *Arch. Malad. Professionnelles*. Paris. 1960, Sept., v. 21, No. 9, 531-3.

The so-called inflammable oils are used for various purposes in industry. The composition of these varies according to need but they contain organic phosphates which are described. Their toxicity is attributable to the presence of tri-ortho-cresyl phosphate.

Here recorded is a case of poisoning in a man who was exposed to droplets of the oil from open gears, in a machine for transmitting power to a revolving fan. There