

available. In a number of common processes, a variety of hazardous fumes and gases are produced. In certain of these, lower maximum allowable concentrations for the major components than those used for the pure substance are proposed. -- Author's abst.

- 729 Range-Finding Toxicity Data: List VI. H. F. Smyth, Jr., et al.
Am. Ind. Hyg. Assn. J. 23, 95-107 (Mar.-Apr. 1962).

A table presents acute toxicity and irritation data on more than 360 compounds, accumulated in a continuing program for screening potential commercial products. The standardized experimental methods are described. -- Authors' abst.

- 730 The Determination of Urinary Fluorides. L. DuBois, J. L. Monkman and T. Teichman.
Am. Ind. Hyg. Assn. J. 23, 157-161 (Mar.-Apr. 1962).

Determinations of fluoride in urine by an ion exchange procedure and by an electrometric method are discussed. Results are compared for replicate samples analyzed by these methods and by the distillation procedure. The accuracy of the three methods was found to be of the same order. The reproducibility of the electrometric method was superior and the method was more rapid. -- Authors' abst.

- 731 Experimental Research into Tellurium as an Industrial Poison. S. E. Sandratskaya.
Gigiena Truda i Prof. Zabolovanaya 6, 44 (Feb. 1962).

The author describes investigations into the toxic properties of the aerosols resulting from condensation and disintegration of elemental tellurium and its dioxide, and into the chronic respiratory poisonings resulting from exposure to these aerosols. These investigations revealed that the finely dispersed oxidized condensation aerosol is the most toxic. In concentrations of 0.05 mg. per liter it reduces the growth rate of animals, reduces erythrocyte count, the hemoglobin level, and the catalase, and changes the normal ratio of the serum protein fractions. The liver is the organ that is most susceptible to the injurious effects of this toxic aerosol. Its synthesizing function is impaired, and autopsy studies reveal fatty degeneration. The nervous system is also damaged (prolonged chronaxy with predominance of inhibitory processes and paresis of the hind extremities and tail). In a concentration of only 0.01 mg. per liter the toxicity of this aerosol was slight; it produced only transitory and reversible changes. Aerosols resulting from disintegration produce analogous changes only in concentrations 10 times as high (0.1 mg. per liter). These data make it possible to establish differential ratings for the maximum permissible levels of tellurium aerosols in the atmosphere of industrial premises.

-- J. Am. Med. Assn. References and Reviews

- 732 Chlorate Poisoning. N. C. Klendshoj, et al.
J. Am. Med. Assn. 180, 1133-1134 (June 30, 1962).

The patient was a 26-year-old Korean physician engaged in the study of renal physiology. By mistake he ingested 40 g. of sodium chlorate. The major feature of the treatment was the combined use of blood dialysis and exchange transfusion using a total of 18 pints of donor blood.

- 733 Investigations of the Toxicity of Sodium Azide. I. Experimental Investigations of Acute and Subacute Toxic Activity. E. A. Bassendowska and Z. Kowalski.
Med. Pracy (Lodz) 12, 427-442 (1961). Polish.

The toxicity of sodium azide (NaN_3) was studied in rats and mice given the compound subcutaneously in doses of 15-72 mg. per kg. The LD_{50} was 45.1 mg. per kg. for rats and 43.06 mg. per kg. for mice. The animals died with paralysis and respiratory failure. The LD_{50} for rats on intratracheal injection of about 0.4 cc. of an aqueous solution was 47.5 mg. per kg. Irregular results were obtained when sodium azide was applied to the skin and conjunctiva of rabbits, but the compound was evidently absorbed by both these routes. Subcutaneous