of stibine, but from the information available it seems to be qualitatively very like arsine

See *Hygienic Guide*

Stoddard solvent is a registered commercial standard of the U S Department of Commerce for a dry cleaning solvent of specifications such that it has a flash point of 100 F (40 6 C), evaporates without residue, and consists of aliphatic, saturated materials and, in some formulations, 15 to 20 per cent aromatics The fire hazard is about that of kerosene, but it is a more satisfactory cleaning solvent It is available under a number of trade names

For discussion of toxicity, see **Heptane** and **Hexane.**

Styrene monomer (phenylethylene, vinylbenzene) is a colorless organic liquid with a characteristic disagreeable odor As either liquid or vapor, it is irritating to the eyes, respiratory tract, and produces an extremely severe dermatitis The odor serves as a fairly good warning of excessive concentrations

In animal experiments, both rats and guinea pigs survived exposures of 2000 ppm for seven hours without fatalities The highest concentration which can be obtained at ordinary temperatures, approximately 10,000 ppm, may be fatal in 30 to 60 minutes

Styrene is flammable and also polymerizes rapidly at slightly elevated temperature and slowly at ordinary room temperature Polymerization produces heat, which in turn increases the rate of polymerization Unchecked, the reaction may become so violent as to produce a fire or explosion

Commerical grades contain as inhibitor to prevent polymerization In storage, styrene should be checked occasionally to assure the presence of the proper amount of inhibitor and the absence of polymers

Aside from this polymerization reaction, styrene can be handled with the precautions for a flammable organic solvent which is also a skin irritant Protective clothing should be worn to prevent skin contact

See *Hygienic Guide*

Sulfur is virtually nontoxic, there is no evidence that systemic poisoning results from the inhalation of sulfur dust Although sulfur is capable of irritating the inner surfaces of the eyelids, the dust may rarely irritate the skin Molten sulfur may contain hydrogen sulfide which is toxic in low concentrations Solid sulfur containing hydrocarbon will, when held in the molten condition, generate hydrogen sulfide The primary hazard in handling solid sulfur is that sulfur dust suspended in air ignites easily

Sulfur chlorides Sulfur monochloride and sulfur dichloride can be dealt with as identical compounds insofar as their health hazards Fuming, corrosive liquids with a strong odor, they are highly irritating even in low vapor concentration Because of this odor and irritation, they have good warning properties

On contact with the skin, sulfur chlorides can cause irritation and if not removed can lead to serious irritation and burns Contact with the eyes of either liquid or vapor will produce severe damage, which may cause scars Inhalation of the vapors may be injurious to the lungs Exposure to the vapor can cause coughing, tears, and burning of the eyes After severe vapor exposure, pulmonary edema may occur There are few reported accidents because of the effective warning afforded by the irritating effect

Sulfur dioxide is a pungent, irritating gas produced in large quantity by the combustion of sulfur or compounds containing sulfur Since it is water-soluble, its action is likely to be limited to irritation of mucous membranes of the upper respiratory system

Endurable concentrations can be tolerated for long periods of time without appreciable danger to health In a concentration range of 1 to 10 ppm, respiratory and pulse rates increase and depth of respiration in unacclimatized individuals decreases Acclimatized individuals, working daily in concentrations in excess of 10 ppm, do not show these changes on exposure to 5 ppm

Severe exposures to sulfur dioxide may result from loading and unloading of tank cars, rupture of cylinders, leaking lines or cylinders in a confined space, following fumigation procedures aboard ships, and other similar type operations Employees who may be subject to such exposures should be provided with proper eye, respiratory, skin, and mucous membrane protection

The compound is considerably more toxic to vegetable life than it is to animals, and plants will be severely damaged by concen-