

concentrations up to about 3 per cent, above which severe skin irritation will prevent a prolonged stay in the area

Explosive concentrations of ammonia can be produced when the contents of a tank or of a refrigeration system are released into an open flame, boiler fire, or arc

See Industrial Data Sheet 251 and *Hygienic Guide*

Amyl acetate (banana oil) is commonly used as a solvent in many industries, particularly for nitrocellulose lacquers. Inhalation of the vapor in high concentration produces irritation of the nose and throat, a feeling of oppression in the chest, palpitations, cough, headache, confusion, and nausea. There is a rather rapid habituation to the odor, and after some exposure the results are less irritating.

It is a fairly good fat solvent that can render the skin dry and scaly and lead to cracking and irritation.

See Industrial Data Sheet 208 and *Hygienic Guide*

Amyl alcohol is widely used as a solvent and produces qualitative effects much the same as those of ethyl alcohol intoxication.

Aniline (phenylamine) is a high-boiling flammable liquid, that can be readily absorbed through the unbroken skin. Poisoning can also occur from inhalation of the vapor and from swallowing of the liquid.

It is primarily a blood and nervous system poison. The most notable signs of poisoning are rapid breathing followed by blue color, particularly of the lips, ears, and fingertips, shuffling, staggering gait, and fixed, hesitant speech. Extremely severe poisoning may cause tremors or convulsions and arrest of respiration. If the clothing is saturated with aniline, the symptoms of acute poisoning may appear with remarkable suddenness. Aniline poisoning may seem so sudden because the early stages are without symptoms except for the blue color of the lips. Poisoning may be advanced and the individual still show no signs except for this color. The first subjective sign is usually a severe, persistent headache.

Clothing saturated with aniline should be removed immediately and the aniline removed from the skin. It is only 3 or 4 per cent soluble in water and even more insol-

ble in soap, but can be readily sponged off with vinegar, lemon juice, or any acid dilute enough not to produce skin burns.

*In case of an accident, however, one should not wait to get acid to remove the aniline but should immediately take off the clothing and get under an emergency shower.* The skin should be immediately and thoroughly cleansed with soap and copious amounts of water, warm if possible. The running water will mechanically remove some of the aniline, at least the gross contamination, and the traces can be removed with dilute acids or alcohol when they are available. Secure a physician's services.

Persons who display symptoms of aniline poisoning without having had skin contact with the liquid should be removed to fresh air immediately, given a mild stimulant such as black coffee (never alcohol), and kept quiet and warm. They should be put under medical supervision and kept under observation for some time, since the symptoms occasionally recur. If breathing has stopped, artificial respiration should be applied.

Floors and workrooms where aniline is to be handled should be impervious, and the operations should be enclosed as much as possible and locally exhausted. Workrooms should be kept scrupulously clean.

Workers should have clean clothing on every shift and should immediately change clothing which becomes saturated with aniline. Even a single glove or a part of a shoe saturated with aniline may cause severe poisoning. In both infants and adults, severe poisoning has resulted from skin contact with laundry marks put on with an aniline ink.

See Industrial Data Sheet 409 and *Hygienic Guide*

Anthraquinone-type compounds (aloes, cascara, senna, and rhubarb) are all strong cathartics and are known in medical practice for their irritant action on the gastrointestinal system. In industry, these compounds can produce lesions of the eye, causing lights to appear to have a halo.

Antimony and its compounds are irritating to the skin and mucous membranes and are systemic poisons. It resembles the action of lead in causing a metallic taste in the mouth, vomiting, colic, loss of appetite and