

Aldrin (1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a - hexahydro - 1,4,5,8 - dimethanonaphthalene) is a chlorinated hydrocarbon insecticide with the effects on the liver and kidneys which are typical of the chlorinated hydrocarbons. It is somewhat more toxic to warm-blooded forms of life than is DDT or chlordane and has a considerable tendency to accumulate in the body.

Aliphatic thiocyanates (Iethanes, Thanite) —see Thiocyanates (aliphatic).

Allyl alcohol is used as a chemical intermediate and as a fungicide and herbicide. It is irritating to all tissue. The response to skin and eye contact may be delayed several hours and then produce muscle spasms and surface irritation.

It causes pulmonary edema upon excessive overexposure. It is readily absorbed through the lungs, gastrointestinal tract, and skin. Absorption leads to widespread irritation of the visceral organs, kidney damage, changes in blood pressure, convulsions, and ultimately death. Rather severe eye irritation is produced at vapor concentrations near 25 ppm.

Allyl chloride, an intermediate for chemical syntheses, is moderately toxic for acute ingestion and skin and eye contact and highly toxic for acute or chronic inhalation. It can be absorbed through the skin but rather large amounts (22 gm per kg) are required to cause death. Skin and eye irritation may be delayed several hours and then become evident as muscle spasms as well as surface irritation.

Animals exposed to allyl chloride vapor showed lung and eye irritation and kidney damage for acute exposures. Chronic exposures produced liver and kidney injury alone. No systemic intoxication of humans has been reported.

Allyl glycidyl ether. The effects of exposure to this compound observed in man are primary irritation and occasional sensitization, the potential exists for cross sensitization with other epoxy agents. This compound is moderately to severely irritating to the skin, eyes, and nose so that an excessively high concentration could not be tolerated. Workers that

were accidentally exposed to the vapors and/or liquid complained of dermatitis, itching, and swelling. Prior to handling this compound, a program of instruction in good personal hygiene should be instituted. Persons having a history of sensitization to epoxy compounds must be protected from contact with allyl glycidyl ether.

Aluminum has not been the source of proved cases of industrial disease and at one time was recommended for the prophylaxis and treatment of silicosis because of the effect of aluminum metal and aluminum oxide in depressing the solubility of silica.

There have been some reports from Germany of lung damage from inhalation of aluminum dust, particularly in grinding aluminum parts. These changes are said to be an increase in connective tissue in the lung, although not in a nodular fashion as is seen in silicosis. Studies of workmen engaged in the same sort of jobs in this country have not revealed similar changes.

Aluminum chloride. Aluminum salts are astringent. Contact may harden and tan skin, resulting in fissuring. Aluminum chloride may act as a sensitizer and produce contact dermatitis. It is likely that the effect on lungs of exposure to aluminum chloride dust or liquid is intimately associated with the particle size and purity of the material involved.

Aluminum oxide has given rise to several reports from European countries and a few from this continent of pneumoconiosis in the manufacture of alumina. The exposure in this job is to aluminum oxide and silica freshly made in an electric furnace. The condition, known as Shaver's disease, is not identical with silicosis and apparently arises only in the handling of the alumina directly out of the electric furnace where the material is dehydrated. There have not been any reports of lung damage from the handling of aluminum oxide hydrate in the form of bauxite.

2-Aminopyridine has been observed in one instance to produce headache, flushing of the face, and temporary elevation of the blood pressure in a person who was exposed for about 5 hours to a concentration of about 5 ppm.