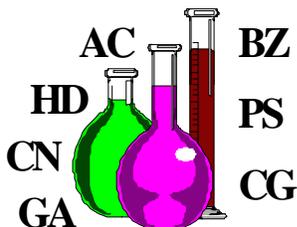


U.S. Army Center for Health Promotion and Preventive Medicine



General Facts About Sulfur Mustard Agent HT

218-33-1096

General

HT is a mixture of 60-percent HD and 40-percent agent T. It is expected that the effects of HT would encompass those of both HD and T. Both HD and T are alkylating agents. T is a sulfur and chlorine compound similar in structure to HD. HT has a strong blistering effect, has a longer duration of effectiveness, is more stable, and has a lower freezing point than HD. Its low volatility makes effective vapor concentrations in the field difficult to obtain. Properties are essentially the same as those of HD.

Synonyms

HD: Bis-2(2-chloroethyl) sulfide;
T: Bis-[2-(2-chloroethylthio)-ethyl] ether
HT;
Sulfur - Mustard.

Description

T is a sulfur and chlorine compound similar in structure to HD and is a clear yellowish liquid with a slight garlic- or mustard-like odor.

Overexposure Effects

HD is a vesicant (blister agent) and alkylating agent producing cytotoxic action on the hematopoietic (blood forming) tissues which are especially sensitive. The rate of detoxification of HD in the body is very slow, and repeated exposures produce a cumulative effect. It causes blisters, irritates the eyes, and it is toxic when inhaled. HD has been determined to be a human carcinogen by the International Agency for Research on Cancer.

Emergency and First Aid Procedures

Inhalation: remove victim from the source immediately; administer artificial respiration if breathing has stopped; administer oxygen if breathing is difficult; seek medical attention immediately.

Eye Contact: speed in decontaminating the eyes is absolutely essential; remove victim from the liquid source, flush the eyes

immediately with water by tilting the head to the side, pulling the eyelids apart with the fingers, and pouring water slowly into the eyes; do not cover eyes with bandages; but if necessary, protect eyes by means of dark or opaque goggles; seek medical attention immediately.

Skin Contact: don respiratory protective masks and gloves; remove victim from agent source immediately; flush skin and clothes with 5 percent solution of sodium hypochlorite or liquid household bleach within 1 minute; cut and remove contaminated clothing; flush contaminated skin area again with 5 percent sodium hypochlorite solution; then wash contaminated skin area with soap and water; seek medical attention immediately.

Ingestion: do not induce vomiting; give victim milk to drink; seek medical attention immediately.

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