CALCIUM HYPOCHLORITE (HTH) STORAGE



Calcium hypochlorite (HTH) is a hazardous material used for disinfecting water. Due to its corrosive and chemically active nature, it requires special precautions in storage and handling to prevent hazardous conditions and ensure the safety of personnel.

B L U

IMPROPER STORAGE OF CALCIUM HYPOCHLORITE IS AN ELEVATED RISK TO FLEET

The NAVSAFECOM Local Area Assessments team identified inappropriate storage locations of HTH, such as near heat sources or moisture-prone areas, increasing the risk of chemical decomposition and combustion. HTH is highly corrosive and can react dangerously if not stored in the proper conditions. If exposed to moisture HTH decomposes, producing oxygen and chlorine, which can fuel fires and make them difficult to extinguish.

NAVSAFECOM AND NAVAL SHIPS' TECHNICAL MANUAL (NSTM) INSTRUCT DO NOT STORE CALCIUM HYPOCHLORITE WITHIN OR NEAR:

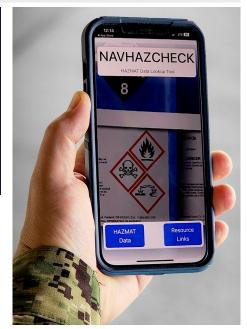
- Any heat source or surface, which may exceed 100°F/140°F
- Areas subject to condensation or water accumulation
- Machinery spaces
- Flammable liquids storerooms
- · Paint lockers
- Berthing spaces
- Storerooms
- Oil and water test laboratory areas

STORAGE LOCKER REQUIREMENTS FOR SURFACE VESSELS:

- 1. Calcium hypochlorite lockers must be made of metal and equipped with three 1/4-inch vent holes at the bottom to release chlorine gas.
- 2. Lockers must be locked when not in use; first-aid lockers are recommended as they are lockable and readily available.
- 3. Each locker should store no more than 48 6-ounce bottles of calcium hypochlorite, with each bottle sealed in an individual plastic bag.
- 4. The storage area must be well-ventilated and must not exceed 100° F.
- 5. The locker must be painted white and labeled in red:
 - "HAZARDOUS MATERIAL CALCIUM HYPOCHLORITE"

STORAGE LOCKER REQUIREMENTS FOR SUBMARINES:

- 1. Calcium hypochlorite should be stored in a medical instrument box (rigid plastic, 9 1/2 x 9 x 7 inches).
- 2. The storage container must be painted white and labeled in red:
 "HAZARDOUS MATERIAL CALCIUM HYPOCHLORITE"
- 3. SSN-class submarines can store up to nine 6-ounce bottles, while SSBN/SSGN-class submarines can store up to 12 6-ounce bottles.
- 4. Do not Store calcium hypochlorite in:
 - Locations within 5 feet of any heat source or surface exceeding 140° F.
 - Areas subject to condensation or water accumulation.
 - Machinery spaces, flammable liquids storerooms, paint lockers, berthing spaces, storerooms or oil and water test laboratory areas.







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