

## CAL-HYPO STORAGE QUANTITY SUMMARY

The following is intended to provide a simplified summary of the quantity of oxidizing chemicals, specifically, Class III Cal Hypo, allowed in operations of the distributor, retailer and end user. The allowances are from the International Fire Code (IFC) and National Fire Protection Association Fire Code (NFPA 1). The Fire Codes are enforced by the Fire Officials throughout the United States. The IFC is the primary Code, adopted in most States and communities, while NFPA 1 is adopted in some States (i.e. Florida) and communities (i.e. Las Vegas).

Fire Code terms and definitions:

1. Control area.
2. One-hour fire resistive construction.
3. H3 occupancy or Protection Level 3.
4. Retail Stores - sales and storage control areas.

They are defined as follows:

1. A **control area** is defined as “a space within a building enclosed and bounded by exterior walls, fire walls, fire barriers and roofs, or a combination thereof”. For maximum quantity allowed for a Class III oxidizer see chart on page 3. There can be up to four control areas per building. A minimum of one hour fire resistive construction separation is required between control areas.
2. **One hour fire resistive construction** (1 hour fire wall) is defined as the period of time that the wall assembly maintains the ability to confine a fire and stay in place based on fire tests of the assembly. There are many ways to construct the wall which are found in the Underwriters Laboratory Directory and Chapter 7 of the Uniform Building Code. Examples are 2" by 4" wood stud, 24" centers, with 5/8" Type X gypsum wallboard or a concrete block wall.
3. **An H3 occupancy or Protection Level 3** describes the level of fire protection required if the building contains very large amounts of pool chemicals. The fire protection includes:
  - Area and height limitations
  - Construction material limits - increase in fire rating and non combustible floors
  - Distance to property lines and other buildings
  - 25% located on exterior wall
  - Automation fire sprinkler requirements
  - Fire rated separation requirements between different occupancies
  - Minimum 150 feet exit travel distance to an exit
  - Ventilation requirements
  - Supervised emergency alarm
  - Standby power for ventilation and alarm
  - Spill control
  - Liquid tight floors
  - Separation of incompatibles

4. **Retail Stores** - Pool chemicals in sales and storage control areas, when displayed or stored in areas accessible to the general public, must comply with the following requirements:

- One hour fire resistive construction.
- Merchandise density less than 200 pounds per square foot for actual floor area.
- Non-combustible floors.
- Packages are UN/DOT certified. (All Axiall packages are certified) .
- Storage and display height limited to 8 and 6 feet respectively. (NFPA 400 limits storage height to 6 feet).
- Minimum 4 foot aisles.
- Package size not to exceed 100 pounds.
- Packages of less than 25 pounds must be stored on pallets, racks or shelves.
- Incompatible materials must be separated by 20 feet or a noncombustible barrier.
- Hazard identification signage on building - NFPA 704, (i.e., HMIS)

Blue	Health	3
Red	Fire	0
Yellow	Reactivity	2
White	Specific Hazard	OX
- Solid oxidizing materials must not be displayed directly beneath liquids.
- Storage area layout available.

For complete information on proper storage and handling of Calcium Hypochlorite contact Axiall's consultant, R. Kenneth Lee at [Rksllee@aol.com](mailto:Rksllee@aol.com) or 501-262-0195, or contact your local fire professional.

# QUANTITY SUMMARY CHART

## IFC & NFPA 1

### 2015 Codes

#### **Distributor**

Up to 1,200 tons with H3 Occupancy or Protection Level 3

#### **End User**

200 lbs. w/IFC (220 lbs. w/NFPA 1) per Control Area.

Four (4) Control Areas allowed per building.

1,150 lbs. w/IFC (1350 lbs. w/NFPA 1) per Control Area when following Retail Store requirements. Double quantities w/approved sprinkler system.

1,200 tons with H3 Occupancy or Protection Level 3

Note: 400 lbs. drum requires H3 Occupancy or Protection Level 3

#### **Retail Store**

1,150 lbs. w/IFC (1350 lbs. w/NFPA 1) per Control Area.

Double quantities with approved sprinkler system.

1,200 tons with H3 Occupancy or Protection Level 3

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