

5-13-2020

We understand that many facilities will be adding Alcohol Based Hand Rub dispensers and are providing the following code requirements to assist you in making the product available, while remaining compliant with fire and building code requirements.

### **Definitions:**

#### **Control Area**

Spaces within a building where quantities of hazardous materials not exceeding the maximum allowable quantities per control area are stored, dispensed, used or handled. *(IFC 2702.1)*

#### **Fire Area**

FIRE AREA. The aggregate floor area enclosed and bounded by firewalls, fire barriers, exterior walls, or fire-resistance rated horizontal assemblies of a building. *(IFC 902.1)*

#### **Flammable Liquid**

A liquid having a closed cap flash point below 100° F (38° C). Flammable Liquids are further categorized into a group known as Class I Liquids. Class I category is subdivided as follows:

- Class IA Liquids having a flash point below 73° F (23° C) and having a boiling point of 100° F (38° C).
- Class IB Liquids having a flash point below 73° F (23° C) and having a boiling point at, or above, 100° F (38° C).
- Class IC Liquids having a flash point at, or above, 73° F (23° C) and below 100° F (38° C).

#### **Flash Point**

The minimum temperature in degrees Fahrenheit at which a liquid will give off sufficient vapors to form an ignitable mixture with air near the surface or in the container, but will not sustain combustion. *(IFC 3402.1)*

#### **Level 1 Aerosol**

Aerosol which has a chemical heat of combustion of less than or equal to 8,600 btu/lb *(per IFC table 2803.1)*

### **Acronyms:**

#### **ADA**

Americans with Disability Act

#### **IFC**

International Fire Code (part of the International Code Council – ICC)

### **Regulatory Compliance:**

#### **How do fire code authorities define ABHRs?**

An alcohol-containing preparation designed for application to the hands for reducing the number of viable organisms on the hands and containing ethanol or isopropanol in an amount not exceeding 95 percent by volume. *(2006 IFC)*

#### **How large can the ABHR Dispensers be?**

The maximum capacity of each dispenser shall be 68 ounces (2 L). (When mounted in rooms separated from the corridor) Aerosol containers are not allowed in corridors. The maximum capacity of each dispenser in a corridor is 41 ounces (1.2 L). *(2006 IFC 3405.5)*

#### **How much ABHR product can be stored in a control area?**

Storage of quantities greater than 5 gallons (18.9 Liters) in a single smoke compartment will need to meet the requirements of NFPA 30 Flammable and Combustible Liquid Code. The maximum allowable quantity per control area is 120 gallons. The quantity shall be increased by 100% in buildings equipped with an approved automatic sprinkler system. Quantity shall be increased by 100% when stored in an approved storage cabinet. *(2006 IFC)*

#### **What are the requirements to comply with Americans with Disabilities Act (ADA)?**

- a. Operation – The dispenser needs to be operable with one hand without grasping, pinching or twisting of the wrist and the force required to activate must not be greater than 5 lbf. *(ADA section 4.27.4)*
- b. Protrusion - Objects with their leading edges between 27 inches and 80 inches above the finished floor shall protrude no more than 4 inches into walks, halls, corridors, passageways or aisles. *(ADA section 4.4.1)*
- c. Accessibility - Dispensers should be mounted so the operating mechanisms are at a height less than 48 inches from the floor. *(ADA sections 4.271 – 4.27.3)*

### **Product Placement:**

#### **What is the total amount of ABHR product that can be used in any one area?**

The maximum quantity allowed in a corridor within a control area is 10 gallons (37.85 L). *(2006 IFC)*

#### **How close can the ABHR dispensers be to each other?**

Dispensers shall be separated from each other by horizontal spacing of not less than 48 inches (1220 mm).

#### **How close can the ABHR dispenser be to an electrical outlet?**

Dispensers should not be installed directly adjacent to, directly above, or below an electrical receptacle, switch, appliance, device, or other ignition source. This rule has been formally interpreted by JAHCO to be 6 inches from the center line of the dispenser to the ignition source. *(2006 IFC)*

#### **Is it acceptable to install the ABHR dispenser over a carpeted area?**

Yes, but dispensers installed directly over carpeted floors shall be permitted only in sprinkler smoke compartments. *(2006 IFC)*

### **Product Specification:**

#### **Are gels, foams, liquids and aerosol ABHRs all acceptable to use?**

Yes, but aerosol ABHRs were just recently added to the National Fire Code, so it would be prudent to check with your local fire marshal to confirm they have adopted the new standards before installing.

#### **What is the maximum allowable level of alcohol content in an ABHR?**

95% isopropyl or ethyl alcohol.

#### **Does NFPA and IFC allow Alcohol Based Hand Sanitizers to be used in Aerosol Dispensers?**

- 1) IFC allows aerosol containers in rooms that are separated from the corridor; however, the maximum capacity of the aerosol dispenser must be 18 oz and be limited to Level 1 aerosols.
- 2) IFC Does not allow aerosol ABHR dispensers in corridors.

Source: 2006 IBC/IFC

GOJO/Purell Fire Code Summary with FAQs and Definitions