

To: Tennessee Department of Education, School Administrators, Inspectors

From: Chris Bainbridge, Director of Codes Enforcement *CB*

Date: June 16, 2020

Subject: Equivalency for Alcohol-Based Hand Sanitizer in Schools and Fire Drills

Alcohol-Based Hand Sanitizer

The coronavirus pandemic has created a major disruption for school operations. There is an increased need for sanitizing products for a safer environment for students and faculty. Alcohol-based hand sanitizer is classified as a combustible liquid and fire and life safety codes provide limits for its location, use and storage.

During normal times, the provisions of 2012 National Fire Protection Association Life Safety Code 101 (NFPA 101) are enforced because it has more stringent limits than those found in the 2012 International Fire Code (IFC). Because of the unique circumstances of the pandemic and the need for more access to hand sanitizer, it is reasonable to allow the more generous provisions of the IFC as an alternative method. The IFC provisions address wall-mounted dispensers, but they should also apply to floor mounted or other dispensers. The provisions are:

5705.5 Alcohol-based hand rubs classified as Class I or II liquids.

The use of wall-mounted dispensers containing alcohol-based hand rubs classified as Class I or II liquids shall be in accordance with all of the following:

1. The maximum capacity of each dispenser shall be 68 ounces (2 L).
2. The minimum separation between dispensers shall be 48 inches (1219 mm).
3. The dispensers shall not be installed directly adjacent to, directly above or below an electrical receptacle, switch, appliance, device or other ignition source. The wall space between the dispenser and the floor shall remain clear and unobstructed.
4. Dispensers shall be mounted so that the bottom of the dispenser is a minimum of 42 inches (1067 mm) and a maximum of 48 inches (1219 mm) above the finished floor.
5. Dispensers shall not release their contents except when the dispenser is manually activated. Facilities shall be permitted to install and use automatically activated "touch free" alcohol-based hand-rub dispensing devices with the following requirements:
 - 5.1. The facility or persons responsible for the dispensers shall test the dispensers each time a new refill is installed in accordance with the manufacturer's care and use instructions.

- 5.2. Dispensers shall be designed and must operate in a manner that ensures accidental or malicious activations of the dispensing device are minimized. At a minimum, all devices subject to or used in accordance with this section shall have the following safety features:
 - 5.2.1. Any activations of the dispenser shall only occur when an object is placed within 4 inches (98 mm) of the sensing device.
 - 5.2.2. The dispenser shall not dispense more than the amount required for hand hygiene consistent with label instructions as regulated by the United States Food and Drug Administration (USFDA).
 - 5.2.3. An object placed within the activation zone and left in place will cause only one activation.
6. Storage and use of alcohol-based hand rubs shall be in accordance with the applicable provisions of Sections 5704 and 5705.
7. Dispensers installed in occupancies with carpeted floors shall only be allowed in smoke compartments or fire areas equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2.

Note: The State Fire Marshal's Office will allow a non-combustible floor mat to be placed over carpet to catch spilled product.

5705.5.1 Corridor installations.

Where wall-mounted dispensers containing alcohol-based hand rubs are installed in corridors, they shall be in accordance with all of the following:

1. Level 2 and 3 aerosol containers shall not be allowed in corridors.
2. The maximum capacity of each Class I or II liquid dispenser shall be 41 ounces (1.21 L) and the maximum capacity of each Level 1 aerosol dispenser shall be 18 ounces (0.51 kg).
3. The maximum quantity allowed in a corridor within a control area shall be 10 gallons (37.85 L) of Class I or II liquids or 1135 ounces (32.2 kg) of Level 1 aerosols, or a combination of Class I or II liquids and Level 1 aerosols not to exceed, in total, the equivalent of 10 gallons (37.85 L) or 1,135 ounces (32.2 kg) such that the sum of the ratios of the liquid and aerosol quantities divided by the allowable quantity of liquids and aerosols, respectively, shall not exceed one.
4. The minimum corridor width shall be 72 inches (1829 mm).
5. Projections into a corridor shall be in accordance with Section 1003.3.3.

Fire Drills

Fire Drills are an important safety provision for schools. They are required to be performed in accordance with state law. Schools should maintain TNDOH social distancing guidance during fire drills. This includes maintaining separation while exiting the building, assembling outside the building and re-entering the building.

MEMO

If a school utilizes a rotating schedule where all students are not in the building at the same time, the State Fire Marshal's Office recommends that drills be scheduled so all rotating groups of students and teachers receive the training and practice provided in a drill. For instance, if there is a Group A and Group B rotation, Group A should be drilled first, and Group B drilled at least 30 school days later and so on. Fire drill logs should reflect the groups that were drilled along with the dates.

Please contact George Smith at 615.604.4195 or george.d.smith@tn.gov if you have any questions regarding the equivalency or guidance issued above.