

Safe Practices for the Use of Alcohol-Based Hand Rub in Care and Treatment Occupancies

This document provides information to address potential fire safety hazards related to the installation and use of alcohol-based hand rub (ABHR) in 'care and treatment' occupancies (e.g. hospitals, nursing homes and long term care homes).

Containers of hand rub are typically located on wall-mounted holders from which a small amount can be dispensed to sanitize hands. Two types of hand rub that have been identified are the gel/liquid type and the foam type (pressurised and non-pressurised). The gel/liquid and non-pressurised foam products are typically classified as a Class IB flammable liquid under Division B, Sentence 4.1.2.1.(2) of the Fire Code. The pressurised foam type product is typically classified as a Level 1 aerosol by the National Fire Protection Association (see NFPA-30B). While ABHR products are subject to the general provisions in Division B, Section 4.1 of the Fire Code, they are exempt from Division B, Section 4.2 of the Fire Code as a pharmaceutical product in closed containers [see Clause 4.2.1.1.(2)(d)]. Consequently, the installation and use of ABHR should be guided by Division B, Section 4.1 of the Fire Code and this document.

ABHR products are dispensed in small quantities thus the fire hazards they present are minimal. However, the following precautions are recommended to achieve an acceptable level of fire safety.

1. Avoid exposure to open flames (e.g. smoker's materials) during and immediately after application. In oxygen-enriched environments, ensure hands are completely dry before touching equipment, devices, bedding or patients/residents. A warning should be provided to potential users of the product e.g. signage or instruction to staff.

2. Locate dispensers away from potential sources of ignition such as radiant heaters that could raise the container temperatures to above 49⁰ C (120⁰ F) and at least 1 m (3 feet) from any open flame. Do not install dispensers above or closer than 150 mm (6 inches) to electrical switches and outlets.
3. Where dispensers are installed in corridors, not more than one dispenser of maximum 1.2 L (gel/liquid) capacity shall be located at each entry into a room.
Note: Level 1, 2 and 3 classified aerosols shall not be installed in corridors.
4. Where dispensers are installed in sleeping rooms, treatment rooms and in other rooms or suites, not more than one dispenser of maximum 1.2 L (gel/liquid) and 0.51 Kg. (aerosol) capacity shall be installed at each point of care (i.e. at each bed or treatment station).
5. Particular care should be taken to use secure dispensers (e.g. lockable units) in unsupervised areas and in areas where there is a risk of misuse.
6. Dispensers shall not be installed directly over carpeted surfaces except if the floor area is sprinklered or other measures are taken to control excess accumulation of product in the carpet.
7. Stock of hand rub product not for immediate use shall be located in a storage room protected with a 1-hour fire separation. Alternatively, excess stock may be stored in a cabinet conforming to Division B, Subsection 4.2.10. of the Fire Code. Bulk dispensing of hand rub product shall only be undertaken in rooms conforming to Division B, Part 4 of the Fire Code.