



Warning: Hot Coffee! - Storage Practices

Avoiding Unwanted Accidents

No. HC-2008-2 December 11, 2008

Learning Objective: The student shall be able to identify recommended consumer product storage requirements for a specific manufactured item.

As the winter season approaches, and liquid or gas fuel costs remain unstable, many people may turn to alternative heating sources to keep warm. In addition, many businesses that have open-air storage or operations may turn on their temporary outdoor heating appliances.



Photo courtesy of Captain Keith Dix, West Metro Fire Rescue, Colorado.

The infrared heater caused the wax-coated wrappings of these manufactured wood products to melt.

The combination of alternative fuel and heating appliances illustrated in today's **Warning! Hot Coffee** may create a condition leading to an unwanted accident. The infrared heater located above the manufactured wood product display caused the wax-coated wrappings to melt.

According to the product's Material Safety Data Sheet (MSDS), the manufactured article contains 44 to 60 percent by weight of natural cellulosic materials, and the balance consists of a proprietary blend of fatty acid materials. The manufacturer recommends the products be stored in a cool, dry location.

The fatty acid constituents in the log will melt at about 140 to 160 °F (60 to 71 °C). The lowest documented flashpoint of any components in the product is about 360 °F (182 °C).

Prolonged exposure to or contact with a significant source of heat greater than 120 °F (49 °C) may soften the item. While the manufacturer states that this may not be a safety concern, it may result in the product breaking apart when handled.

It's impossible to predict whether continued exposure to the radiant heat from the ceiling unit might have caused a problem any more severe than softening the logs, but it is a good reminder that fire inspectors should look for potential problems in unexpected places.

Keeping combustible materials away from heat sources is an important part of any fire protection strategy. (Coffee Break Training 2008-31 discussed the need for clearances around heat-producing appliances.)

