

Industry Alert Bulletin Regarding Mercury

Effective as of April 1st 2002 all New England States require mandatory reporting of products that contain mercury. Other states are likely to follow.

To avoid the cumbersome reporting process and to comply with environmental concerns, manufacturers of industrial glass thermometers have chosen to supply thermometers with alternate fills. The industry standard “red reading mercury” is being replaced with organic liquids. The color offered is usually blue or green to make it easy to identify and distinguish between the red reading mercury and the liquid in glass thermometers. The readability is improved with the lens magnifying glass, and the industry standards for accuracy are upheld.

Unlike mercury, all liquids used are not the same. Non-toxic and biodegradable fills are available, and users are advised to consult with the suppliers for MSDS information regarding the health, safety and environmental impact of the fluid.

Temperature limitations are a consideration when selecting liquid in glass thermometers. While liquid has always been the choice for low temperature applications, less than – 40°F, where mercury freezes, the high temperature limit for the liquid in glass is 500°F. Mercury has been used up to 1000°F. Glass thermometers are made with an expansion chamber on the top of the column that provides over temperature protection. An experienced technician can use the expansion chamber to rejoin a separated column. This procedure is less risky with the new liquid fills, as mercury containment is avoided in the event of a broken glass tube.

As with mercury, it is recommended that a plastic window be used to block UV when used on outdoor applications.

The time proven industrial glass thermometer, with the new liquid in glass construction, is improved when informed selection and use is adhered to.

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