

Use of Traex by Vollrath[®] squeeze bottles at elevated temperatures:

Traex by Vollrath[®] Squeeze bottles are made of a resin referred to as “Low density Polyethylene” The nature of this material allows it to withstand temperature ranges up to a 170° F temp. **PLEASE NOTE: This is a water exposure temperature only and does not include direct flame or microwave heat exposure*.**

170° F is roughly the same temp the bottle would be exposed to in a commercial dishwasher application. However, it should be noted that this is an exposure temperature and not a *working temperature*. There is a difference. An *exposure temperature* means that the bottle can be safely exposed to this temperature for short periods of time without substantial degradation of the material or function. A *working temperature* refers to a temperature at which the bottle can continually be exposed to without substantial degradation of the material or function. At 170° F the squeeze bottle becomes very soft and certainly too hot for someone to hold on to directly and is therefore a **maximum** “*exposure temperature*” only.

Vollrath recommends a maximum of 105° F working temperature for the Traex by Vollrath[®] Squeeze bottles. Beyond this temperature, thermal protection would be needed between the user and the bottle to avoid serious burn exposure. In general, scald burns occur when the time-temperature envelopes are exceeded. It is not a simple matter of temperature only. For example, third degree burns will occur in 1 second at 160° F, or in 30 seconds at 130° F, but the skin pain threshold is only about 106° F - 108° F!

Vollrath does not endorse the use of any squeeze bottle being used at any temperatures over 105° F for the aforementioned reasons. It should also be noted that at temperatures in excess of 105° F there is the potential that the bottle could become so soft that the cap could come off of the bottle while squeezing it.

* Direct flame or Microwave exposure are not recommended due to potential for bottle degradation and the possibility of permanent damage to the bottle and/or injury to the end user.