

Technical Information Sheet

KIMBLE®

RECOMMENDATIONS FOR THE CARE AND USE OF GLASSWARE

To Avoid Serious and Personal Injury, Avoid Abrasions

An abrasion reduces the strength of glass, making it more susceptible to breakage under impact and/or thermal shock. Thermal shock may result from sudden changes in temperature or use on either a burner or hot plate. Serious injuries could result if breakage occurs while glass holds heated and/or corrosive liquid.

Recommended Glassware Cleaning Procedures

- Washing machines may be used. Support racks on the washer must be well maintained. The support pins should be coated with a non-abrasive material to prevent metal to glass contact and scratching.
- For manual washing, use only plastic core brushes that have soft non- abrasive bristles. Soft, clean sponges or other wiping materials may be used. DO NOT USE THESE BRUSHES OR WIPING MATERIALS WITH ABRASIVE CLEANERS. Keep them clean. Scotch Brite and similar scouring pads will scratch glass and should not be used.
- Inspect glassware before each use and discard if scratched, chipped, cracked or damaged in any way.
- Many commercial glass cleaners are available. Follow the manufacturer's directions for the use of these products, since some are corrosive and can damage the glass.
- Organic solvents are acceptable cleaning agents when conditions warrant their use.

WARNING:

- Do not place metal or other hard objects, such as spatulas, glass stirring rods, or brushes with metal parts, inside the glassware. This will scratch the glass and cause eventual breakage and injury.
- Do not use strong alkaline products and hydrofluoric acid as cleaning agents; they are glass dissolvers and can damage the glassware and eventually cause breakage which can result in injury.
- Do not use any abrasive cleansers, including soft cleansers (i.e. Ajax, Comet, Old Dutch, Soft Scrub, etc.), as these will scratch the glass and cause eventual breakage and injury.
- Do not place hands inside glassware while wearing any jewelry, particularly diamond rings, as these will score the inside of the glassware and eventually cause breakage and injury.
- Do not heat glassware to temperatures (>800 °F) needed to burn out carbon residues. This will result in the introduction of permanent stresses in the glass that will eventually cause the glassware to break, resulting in possible injury.

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Avoid Impact

Glass will break as a result of impact. Use care when handling to avoid impacting hard objects, such as spigots, other glassware, counter tops, etc.

Heating Glassware

- Use wire gauze when heating over open flame.
- Use either low or medium heat settings when using a hot plate. High hot plate settings will cause excessive localized heating of the glassware and will eventually cause breakage and possible injury.
- Do not heat glassware designated as heavy duty unless recommended by manufacturer. Even though these items have added mechanical strength, they are more susceptible to breakage from thermal shock when heated.
- Do not allow the contents of the container to boil dry, as this may induce permanent stresses that will eventually cause breakage. Discard containers that have been boiled dry.
- DO NOT evacuate or pressurize unless recommended on the Kimble Chase website.

Centrifuge Tubes

RCF values can be significantly reduced if the glass tubes have been scratched or otherwise physically abused resulting in surface damage and lowered glass strength.

