

# SAFETY TIPS LABORATORY GLASSWARE

## Safe Handling of Glassware

With the amount of glassware used in laboratories today, in various laboratory operations, chances are good that an accident will result in cuts, slashes, or slices. Minor cuts are the most frequent result of laboratory glassware accidents. However more serious accidents could result with flying glass, exposure to chemicals, or fires. Remember, each piece of glassware is designed for a specific purpose and it should only be used for that purpose.



### Inspection

- Always inspect glass for scratches, abrasions, cracks or chips before using or cleaning.
- Safely dispose of any damaged glass.
- Inspect glass routinely for strain with a polariscope.

### Washing/Cleaning

- Always inspect glass for chips and fractures prior to cleaning, especially any solvent or acid cleaning.
- Use Alconox or similar type detergents.
- Avoid HF, strong alkalis or abrasive cleaners.
- Distilled water rinse.

### Storage

- Store glass in a manner to avoid vessels bumping each other.

### Temperature, *Borosilicate Glass*

- Standard use limit – 240°C.
- Maximum short-term use – 490°C.
- Avoid rapid temperature changes or rapid thermal shock.

### Heating Glass

- Heat with mantles, Instatherm®, heat tapes, guns or immersion heaters.
- Avoid direct flame as much as possible.
- Standard temperature limit for borosilicate glass is 240°C.