



# Maastricht University

## Supplementary work instruction

Working in a safe and environmentally friendly manner with glass

### Safe working method

Prior to commencing activities

- Investigate whether alternatives to glass are available, such as plastic.

### During the activities

#### *A) Hygiene and personal protective equipment*

- Use safety goggles in the event of significant risk of breakage.
- Use protective mantle made of metal gauze when using a vacuum excicator and vacuum extraction stream.
- Use a safety guard around a rotary evaporator or PVC-coated round-bottom flasks.
- Treat minor cuts by cleaning them, then disinfect and cover with a sterile covering (in department's First Aid [EHBO] box). If in doubt or in the event of larger cuts or wounds, call a First Aider to treat the wound (tel. 1333). In the event of injury caused by glass that has been in contact with human material, take action as described in the work instruction for working safely with human material (see [Bio-safety](#)).

#### *B) Handling glassware*

- Use the correct type of glassware for the intended use: thermal or chemically tempered (Pyrex, Duran) for e.g. heating, or glassware with PVC coating for use in increased pressure or vacuum.
- Check glassware for damage, scratches or deep grooves prior to use. If the glass is damaged or can no longer be used reliably, dispose of it in accordance with the waste substances regulation (see [Waste substances regulation](#)).

- Conduct experiments using recombinant DNA and genetically modified or pathogenic micro-organisms in accordance with the applicable work instruction for GMO (see [Bio-safety](#)).
- If glass parts become wedged in apparatus structures, remember the rule: once it's stuck, it's stuck. If possible, try to insert a piece of cork or rubber between the glass and the metal.
- Obtain plastic aids for apparatus structures or readymade cooling devices and extraction streams with plastic pipe connections.
- Ensure that the tube and rubber hose or plug are the correct size. Treat them in advance with water or silicon grease or use specially-developed plugs or Teflon coverings.
- Warm hardened PVC hoses using a heating fan.
- Use a cloth to carefully remove tube from rubber plug or hose.
- Heat heat-resistant glass in the same way (e.g. with a heating fan or oil bath).
- Allow heated glassware to cool off gradually, in the open air, for example.
- Sweep up glass fragments with care using a dustpan and brush, and dispose of in accordance with the waste substances (see [Waste substances regulation](#)).
- Transport large items of glassware and bottles in a basket or bucket with a handle, or in a barrow.
- Do not overfill bins with glassware to be cleaned. If there are large quantities to be cleaned, contact the Central Glass and Sterilisation Services (CGSA).

#### After activities are complete

- Keep the washing of glassware by hand to a minimum; instead use the washing machine (CGSA)
- Do not stow away dirty glass, as it will not be apparent later on what the contents were. Clean glassware immediately after use (see [work instruction for working in a safe and environmentally friendly manner in Maastricht University chemical laboratories](#))
- Store glassware in such a way that it is not damaged when drawers or cupboards are opened.

#### Additional information

For further information, please contact the Department Environment on 043 38 82627 or 043 38 82628, or email [maya.debruijn@maastrichtuniversity.nl](mailto:maya.debruijn@maastrichtuniversity.nl) or [marc.fischer@maastrichtuniversity.nl](mailto:marc.fischer@maastrichtuniversity.nl)