

# **Data Sheet**

Article: Test Tube 120x12 Soda Lime; round bottom; without rim

Article no.: 90101122

Material: Soda Lime Glass

(Water resistance DIN ISO 719: HGB 3;

Acid resistance DIN 12116: S1; Alkali resistance ISO 695: A2)

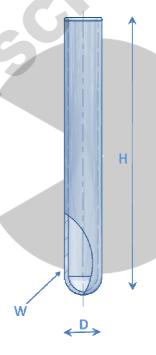
Autoclavable

Dimension/Standard: Acc. ISO 4142

Height H: 120 mm

Outside diameter D: 11,75 mm

Wall W: 0,6 mm



# Handling instructions

The product is made for general use in laboratories.

Due to transport and storage of the products, it cannot be excluded that substances or materials may adhere to the product. Appropriate preparation and cleaning of the products before the planned application is recommended.

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

Do not evacuate or pressurize unless it is recommended.

Substances can splash out of the glass containers. Wearing safety glasses is recommended.



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 AND HANDLING PROCEDURES

#### \*Proper cleaning procedure:

Washing machines may be used. Support racks on the washer must be well maintained. The support pins should be coated with a nonabrasive 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 the glassware before each use and discard if scratched on inner surfaces, 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.

## \*Improper cleaning procedure:

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, 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.

### **HEATING GLASSWARE**

When heating, use a safe heat source and, if necessary, additional equipment such as wire gauze to ensure that the glass containers can be used safely.

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 stock 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.

The maximum operating temperature is 400°C with a thermal shock resistance  $\Delta t$ =100 k. Avoid shock-like temperature changes.

Inform yourself about the applicable, additional regulations in your workplace.