

## 20ml Glass Syringe - Laboratory

with metal luer lock

D2

D1

2 4 6 8 10 12 14 16 18 20cc

EVEN POR Laboratory Use

D3

**Tomopal Part #** 130-4520 **Piston Outside Diameter:** 19.60 mm ± 0.20 mm D1) Barrel Diameter Outside:  $23.60 \text{ mm} \pm 0.40 \text{ mm}$ D2) Barrel Collar Diameter: 34.40 mm ± 0.75 mm D3) Piston Collar Diameter: 24.20 mm ± 0.65 mm L) Length:  $143.70 \text{ mm} \pm 0.50 \text{ mm}$ **Increment:** 1.0 ml 20.0 ml ±1.5% of volume Volume:

## **Features:**

- The syringe is made from heat resistant borosilicate glass.
- The material and construction is resistant to breakage from shock and sudden temperature changes.
- It is annealed and tested until free of internal strain, to withstand repeated washing with hot water.
- Reinforced at luer lock tip and barrel base, the points at which most breakage occur.
- Plunger is individually ground and fitted to barrel for smooth movement with no back flow.
- · Barrel rim is flat on both sides to prevent rolling and is wide enough for convenient finger tip grip.
- · The syringes are available in custom fit design. The custom fit syringes are uniquely numbered for matching piston and barrel.
- The metal luer lock tip meets the specification of American National Standards for Medical Materials luer taper fitting performance, HIMA MD 70.1 - 1983.

Color:

- The metal luer lock fitting is made from nickel-plated brass and fits all female luer lock fittings.
- · The syringe is clearly marked with graduations of 1.0 and 2.0 ml. The graduations are permanently fused for lifetime legibility.

## **Glass Properties:**

Expansion coefficient:	52 +/- 10 <sup>-7</sup> / Centigrade
Density:	2.33g +/- 0.03g CM <sup>3</sup>
Modulus of elasticity:	64 +/- 10 <sup>3</sup> mm <sup>-2</sup>
Water resistance:	First Class
Acid resistance:	First Class
Alkali resistance:	First Class

Softening point:760 @ degrees centigradeMelting temperature:1250 @ degrees centigradeStrain point:500 @ degrees centigradeAnnealing point:545 @ degrees centigradeHardness:7

Clear

Tel: 916.429.7240 Fax: 916.429.2701