



Guth Laboratories^{INC}

Model AS-3410-MT Guth Model 34C



ALCOHOL BREATH TEST SIMULATOR AND CALIBRATION STANDARD

The Guth Model 34C Simulator is approved by the National Highway Traffic Safety Administration (NHTSA) and published on their Conforming Products List (CPL). Simulator has a completely adjustable solid state temperature controller eliminating broad range mercury-in-glass thermostats. Components within the wet chamber area of the simulator are rust resistant, chrome plated, or stainless steel. The all metal non-magnetic top housing is chrome plated brass, preventing rust and corrosion. This provides for uniform headspace heating and outstanding mechanical security for all fasteners.

The Model 34C meets all electrical and safety standards by Underwriters Laboratories (UL) and Standards Council of Canada (CUL). The Model 34C is recommended for hospitals and clinics, conforming to these critical electrical standards. The Model 34C has a double pole power switch to eliminate shock hazard, plug-in replaceable long life neon power and heater indicator lamps. An external plug-in fuse is provided offering convenient replacement. When the sensing probe is either shorted or open, the immersion heater will be disabled. A safety ground wire is welded to this heater housing to prevent electrical shock hazard in the event an internal electrical malfunction occurs. The heater will also turn off automatically if solution is absent from the wet chamber area. The heating element will turn off when the simulator is subjected to a RF field of 10 volts/meter or greater.

The simulator is provided with a high precision serialized mercury-in-glass National Institute of Standards and Technology (NIST) reference thermometer to monitor temperature of the solution.

PERFORMANCE

Solid state controller is adjustable and maintains better than $\pm .05^{\circ}\text{C}$ at setpoint (34.0°C) Recovery time - less than 10.0 seconds No grommets in test chamber Warm-up time from cold start-less than 10 minutes Headspace-heated Output exhaust pipe-heated A secondary baffle is provided Laboratory Glass Container-500 ml \pm 5% fill mark molded



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into glass

MECHANICAL

Weight: 4.0 lbs - 1.816 kgms (without stand)
Size (HxWxD): 10 x 4.5 x 4.5 - 254 mm x 114.3 mm x 114.3 mm
Container Seal: O ring neoprene
Inlet Tube: 3/4 (19.05 mm) Extended from top surface of housing
Outlet Tube: 3/4 (19.05 mm) Extended from front surface of housing

ELECTRICAL

UL and CUL listed
Power Input: Domestic: 105/130 VAC @ 60 Hz
Foreign: 220/240 VAC @ 50 Hz
Power Switch: Safe, off-on DPDT switch
Power: 70 watts - external fused @ 1.0 amp (plug-in)
Indicator Lamps: Neon, plug-in 15,000 hr Avg. Life
Temperature Controller: Solid State
Heater Shutoff Protection: No solution in container
Shorted or open sensor.
RF fields of 10 volts/meter or greater.
Printed Circuit Board: Gold plated plug-in edge board connector

TEMPERATURE MONITOR

NIST Mercury-in-Glass serialized reference thermometer

SURE-LOK™ CONNECTORS

Male and Female connectors prevent accidental, improper connection to breath analyzer.

OPTIONS

Simulator Protector: Simulstand (Lexan with anodized aluminum spacers)
Time-out Timer: 0-60 Minute total power shutoff
Manual reset

STANDARD WARRANTY

One Year: Parts and labor
Two Years with Time-out Timer Option: Parts and labor