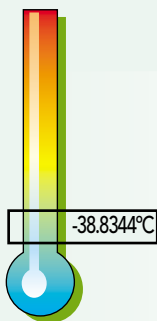


# Mercury Triple

## Point Apparatus



### INTRODUCTION

At  $-38.8344^{\circ}\text{C}$  the Mercury Triple Point is probably the third most important Fixed Point of ITS-90.

The embodiment of the Mercury Triple Point was originally developed in America with a very close cooperation between Henry Sostmann and Dr. Furukawa of N. B. S. (now NIST) over twenty years ago. The physical size, materials and metal purity are identical to this original design. The Mercury is distilled four times leaving impurities of 10 to 15 parts per billion. The cells made by Isotech still use the original design, purity and supplier of Mercury.

In International Intercomparisons the cells made by Isotech have always been within the National Laboratories uncertainty of calibration and with over 20 years of successful use throughout the world the cell embodies the finest traditions of production and use. Recently Dr. Furukawa opened some of his original cells which are over 20 years old, and the Mercury was still above 99.99995% pure. A reflection of the long term performance of the design.

In purchasing the Isotech Mercury Triple Point Cell you will join an elite group of satisfied users who have been using the cell for up to 20 years.

The Mercury Triple Point Cell is normally used on its Melt Curve, although it will also give very good results whilst it is freezing.

Henry Sostmann and his team designed a cryostat to Freeze and Melt the cell which is now described.

### Mercury Apparatus

This apparatus is ideal and user friendly meeting all normal requirements. There is however a document describing "Optimal Realizations" and also occasions where very long plateaus are desired. For these special applications we have another piece of apparatus called the 915 'Neptune' Bath which will give week long plateaus. *The 915 is described fully in Databook 2.*

Model No	ITL-M-17724 Cell ITL-M-17725 Apparatus
Temperature Range	$-36^{\circ}\text{C}$ to $-42^{\circ}\text{C}$
Accuracy	Refer to page 15
Ambient Limits	$18^{\circ}\text{C}$ to $28^{\circ}\text{C}$
Plateau Duration	8-12 hour Plateau
Power	750W typical. 208-240 VAC, 50/60Hz
Dimensions	Height 960mm Width 600mm Depth 560mm
Weight	96kg

#### How to order

ITL-M-17724 Cell

ITL-M-17725 Mercury Triple Point Apparatus

