

# FREEZE POINT APPARATUS

- Conform to ASTM D2386 and D1177 Manual Methods
- Mechanically refrigerated
- Replaces the inconvenience of using liquid nitrogen or dry ice
- Full visibility baths for easy sample observation
- Lowest temperature of -75°C

### Also for Methods:

ASTM	D2386, D1177
ISO	3013
IP	16
FTM	791-1411
DIN	51 421
NF	M07-048

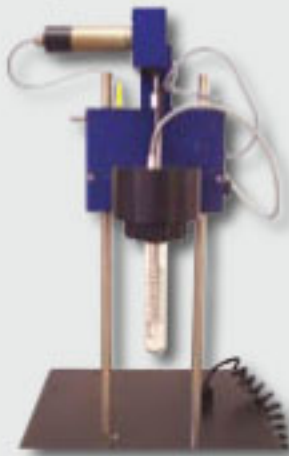
**Model 369** is a mechanically refrigerated liquid bath capable of -75°C as the lowest operating temperature. It has a tall, clear Dewar jar accepting two ASTM D2386 or D1177 test assemblies (available separately). The clear Dewar jar allows allowing full visibility of the test sample. The bath is mechanically agitated for improved bath temperature uniformity and stability. Temperature control display is provided by a PID digital indicating controller.

**Model 79F** has a lowest operating temperature of -75°C. It is a multi-utility bath capable of performing either two manual freeze point tests, or measuring low temperature kinematic viscosity of 4 samples as per ASTM D445.

**Model 389** is Model 79F bath equipped with 2 Model MF-10 manual freeze testing assemblies.



▲ Model 369



▲ Model MF-11

**MF-10** is a manual freeze testing assembly mounted on a support rod. The double walled test tube is firmly attached to the assembly to be concentric with the wound wire stirrer. It includes a precision motor moving the wound wire stirrer at 1 to 1.5 cycles per second. The test tube is lowered into a cold bath to begin testing. When the fuel sample freezes the assembly is manually lifted from the cold bath for the operator observe the melting point temperature.

**MF-11** is similar to Model MF-10, but with the additional capability to signal the operator to make the observation for freezing when a predetermined sample temperature is reached.

## ▶ AVAILABLE MODELS

Model No.	Operating Temperature	ASTM Test Method	Sample Capacity	Dimensions inches (cm)	Ship. Weight lbs/cu.ft
369	+15 to -75° C	D2386 and D1177	2	28 x 27 x 37 (71 x 69 x 94)	300/20
389	+15 to -75° C	D2386	2	22 x 22 x 26 (56 x 56 x 66)	310/18
79F	+15 to -75° C	D445 or D2386	4 or 2	22 x 22 x 26 (56 x 56 x 66)	300/17
MF-10		D2386 Manual Test Assembly	1		
MF-11		D2386 Manual Test Assembly with Alarm	1		