Temperature Testing

operator notes

Temperature is a critical component to the treatment process. Low temperature causes high dissolved oxygen levels and requires adjustment of aeration rates in an activated sludge plant. High temperature causes low dissolved oxygen levels and requires that blower aeration rates be increased. Temperature can also be an indicator of toxic dumps.

All of our lab thermometers are manufactured to the highest quality standards. All have permanently fused markings which will not wear off, even after years of use. Most also include a suspension ring at the top of the stem for convenience. Here are some helpful hints to help you decide which thermometer is best for you.

Partial immersion vs. total immersion
Partial immersion thermometers are designed for taking temperature measurements in limited space, including small samples, ovens, and shallow baths. Since only a small portion of the thermometer is immersed, it is subject to outside temperature factors. Total immersion thermometers are generally more accurate than partial immersion thermometers, but they do require more space for taking measurement.

Mercury-filled vs. Enviro-Safe® and spirit-filled
Mercury thermometers have been used for years and are generally more accurate than similarly designed Enviro-Safe and spirit-filled models. However, if your mercury-filled thermometer should break, mercury is considered a hazardous waste and must be disposed of properly. Whenever your application permits, we suggest using Enviro-Safe or spirit-filled thermometers.

USABlueBook® BRAND PRODUCTS

USABlueBook® Enclosed Thermometers

YOUR BEST VALUE!

GREENER CHOICE

- **Economical choice for temperature measurement inside your chamber**
- **Calibrated to NIST standards**

NO MERCURY

NIST

These enclosed thermometers safely measure temperature in your incubators, freezers, refrigerators or ovens. The bottle fill keeps the temperature stable when opening the instrument door, giving you greater accuracy. Fluoropolymer coating contains glass and liquid in case of thermometer breakage.

Includes: magnet and certificate of analysis printed on recycled paper. Packaging is made of recycled materials.

RANGE	ACCURACY	DIVISIONS	LENGTH	DESCRIPTION	STOCK #	EACH	QTY 4+
-25 to -5°C	±0.2°C	0.1°	210 mm (8.25")	Freezer	**36711**	$	$
-2 to 10°C	±0.2°C	0.1°	180 mm (7")	Refrigerator	**36712**		
15 to 30°C	±0.2°C	0.1°	180 mm (7")	Incubator	**36713**		
25 to 45°C	±0.2°C	0.1°	190 mm (7.5")	Incubator	**36714**		
50 to 115°C	±0.5°C	0.5°	200 mm (8")	Oven*	**36715**		
-30 to 0°C	±0.5°C	0.5°	135 mm (5.3")	Freezer	**36716**		
-5 to 15°C	±0.5°C	0.5°	135 mm (5.3")	Refrigerator	**36717**		
15 to 50°C	±0.5°C	0.5°	135 mm (5.3")	Incubator	**36718**		
50 to 180°C	±2°C, ±4°C above 130°C	1°	145 mm (5.7")	Oven*	**36719**		

***Sand filled**

Frio-Temp® Thermometers

GREENER CHOICE

NO MERCURY

- **Safely and accurately measure the temperature of freezers, refrigerators, incubators and ovens**
- **Liquid fill is non-toxic, non-hazardous Enviro-Safe®**

Frio-Temp thermometers include both Velcro® and magnetic attachments for your convenience. All thermometers have a unique serial number and include a statement of accuracy traceable to NIST.

RANGE	ACCURACY	DIVISIONS	LENGTH	DESCRIPTION	STOCK #	EACH	QTY 4+
PRECISION ENVIRO-SAFE THERMOMETERS							
-25 to -5°C	±0.2°C	0.1°	210 mm (8.25")	Freezer	**41445**	$	$
-2 to 10°C	±0.2°C	0.1°	180 mm (7")	Refrigerator	**41446**		
15 to 30°C	±0.2°C	0.1°	180 mm (7")	Incubator	**41447**		
25 to 45°C	±0.2°C	0.1°	190 mm (7.5")	Incubator	**41448**		
95 to 115°C	±0.2°C	0.1°	200 mm (8")	Oven*	**41449**		
ENVIRO-SAFE THERMOMETERS							
-30 to 0°C	±0.5°C	0.5°	135 mm (5.3")	Freezer	**34464**	$	$
-5 to 15°C	±0.5°C	0.5°	125 mm (4.9")	Refrigerator	**41090**		
15 to 50°C	±0.5°C	0.5°	135 mm (5.3")	Incubator	**41091**		

***Fine glass bead fill**