

xylem



Professional Measurement Technology

ACCORDING TO HACCP STANDARDS

2023

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Core Temperature Measurement

Basic folding Thermometer TLC 700

Temperature measurements according to HACCP standards.

Temperature measurement of food

- During transport
- Storage and
- During incoming goods inspections



The TLC 700 offers:

- Compact design with foldable penetration probe
- Measurement range from -30 °C to +220 °C
- ± 0.5 °C (-30 °C to +100 °C) accuracy exceeds standard requirements
- According to HACCP (Hazard Analysis Critical Control Points) standards
- User replaceable battery
- Waterproof housing (IP 65)
- Factory calibration certificate included

A guide to temperature limits

These temperature values insure optimum freshness:

Food

Transport and Storage Temperature	
Fresh milk products	$\leq +6^{\circ}\text{C}$
Milk at a Dairy	$\leq +6^{\circ}\text{C}$
Pasteurized milk, repackaged milk	$\leq +8^{\circ}\text{C}$
Butter	$\leq +10^{\circ}\text{C}$ ($\leq +6^{\circ}\text{C}$ for transport)
Dessert	$\leq +7^{\circ}\text{C}$
Cheese (except hard cheese)	$\leq +10^{\circ}\text{C}$
Ice cream, prepackaged	$\leq -18^{\circ}\text{C}$ ($\leq -20^{\circ}\text{C}$ for transport)
Ice cream, scooped and served	$\leq -10^{\circ}\text{C}$
Eggs (if eggs to be stored over 18 days)	from $+5^{\circ}\text{C}$ to $+8^{\circ}\text{C}$
Egg products (deep frozen)	$\leq -18^{\circ}\text{C}$
Egg products (frozen)	$\leq -12^{\circ}\text{C}$
Egg products (fresh)	$\leq +4^{\circ}\text{C}$
Raw egg-containing food products (e.g. fresh mayonnaise)	$\leq +7^{\circ}\text{C}$
Bakery products with partially baked filling	$\leq +7^{\circ}\text{C}$
Fresh meat products, fresh meat (including big game)	$\leq +7^{\circ}\text{C}$
Fresh poultry (rabbit and small game)	$\leq +4^{\circ}\text{C}$
Exception: flightless birds (as approved)	$\leq +7^{\circ}\text{C}$
Meat preparation	$\leq +4^{\circ}\text{C}$
Meat preparation (production and sales on site)	$\leq +7^{\circ}\text{C}$
Cold cut plates	$\leq +7^{\circ}\text{C}$
Ground meat	$\leq +2^{\circ}\text{C}$
Ground meat (production and sales on site): 24 hours delivery	$\leq +7^{\circ}\text{C}$ ($\leq +2^{\circ}\text{C}$ for transport)
Offal / Organ meats	$\leq +3^{\circ}\text{C}$
Meat, poultry, fish (frozen)	$\leq -12^{\circ}\text{C}$
Meat, poultry, fish (deep frozen)	$\leq -18^{\circ}\text{C}$
Fish, fish products	in melting ice or $\leq +2^{\circ}\text{C}$
Smoked fish	$\leq +7^{\circ}\text{C}$
Fishery products (marinated, soured, smoked)	$\leq +7^{\circ}\text{C}$ ($\leq +6^{\circ}\text{C}$ for transport)
Fishery products (fresh) plus crawfish and mollusk products	in melting ice or $\leq +2^{\circ}\text{C}$
Delicacies	$\leq +7^{\circ}\text{C}$
Raw fruit and vegetables	$\leq +7^{\circ}\text{C}$
Salads, fresh and / or crushed, delicacies salads	$\leq +7^{\circ}\text{C}$

Retained samples for testing

Save for a minimum of 10 days $\leq -18^{\circ}\text{C}$

Hot Meals

Heated (core temperature) $\geq +70^{\circ}\text{C}$
 Food oil quality $\geq 24\% \text{ TPM}$
 Food counter $\geq +65^{\circ}\text{C}$

Cold Meals

Storage temperature until serving $\leq +7^{\circ}\text{C}$

Disinfection facilities

Water $\geq +82^{\circ}\text{C}$



Cooperation partner of
 the Bundesverband der
 Lebensmittelkontrolleure
 Deutschland e. V.
 (Federal Association of Food
 Inspectors Germany e. V.)



Flexible Core Temperature Measurement

Core Thermometer TTX 200 with fixed probe with cable and handle.

- Temperature control during the manufacturing of food
- Food inspection and
- In cold storages



The TTX 200 offers:

- Fast and easy core temperature measurement with the external sensor with 60 cm silicone cable and handle
- Very large display with big numbers for easy reading
- Measurement range from -30 °C to +199.9 °C
- Accuracy type T ± 0.5 °C (-30 °C to +100 °C)
- According to HACCP (Hazard Analysis Critical Control Points) standards
- Waterproof housing (IP 65)
- Factory calibration certificate included



Food oil quality Measurement

Food Oil Monitor Set* FOM 330-1

Objective evaluation of the quality of frying oil.

- Restaurants
- Canteens
- Catering
- Snack bars



The FOM 330 offers:

- Determination of the frying oil quality in the range from 0 % to 40 % TPM
- Maintaining a constantly high food quality
- Get clear measurement results
- All around visible signal lamp for displaying the food oil quality
- Reduction of costs due to exact knowledge of the right time to change the oil
- Waterproof (IP 67), easy to clean housing
- Factory calibration certificate included

**Set contains food oil monitor, protection cover and carrying case.*



Monitoring and Recording the temperature

Temperature data logger EBI 20-T1 with internal temperature sensor.

Documentation and continuous monitoring of temperature during transport and storage of sensitive goods and foodstuff.



The EBI 20-T1 offers:

- Internal temperature sensor
- Measuring range from -30 °C to +70 °C
- Min/Max values in display
- According to HACCP (Hazard Analysis Critical Control Points) standards
- Waterproof housing (IP 67)
- Factory calibration certificate included

Note: The logger requires the software Winlog.basic and an interface EBI 20-IF. The EBI 20-T1-set contains both.



Surface and Core Temperature Measurement

Dual Infrared / Fold-Back-Thermometer TLC 750i
Convenience of accuracy and speed in one device.

- During incoming goods inspection, transport and storage
- Cold chain monitoring
- Ideal for retail, supermarkets, food service and food industry



The TLC 750i offers:

- Contamination free surface measurement and core temperature measurement in one device
- Measuring range from -50 °C to +250 °C
- Display with backlight for reading in dark environments
- Display can be upside down for reading from both sides
- °C / °F switchable
- Exchangeable battery
- According to HACCP (Hazard Analysis Critical Control Points) standards
- Waterproof housing (IP 65)
- Factory calibration certificate included





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Type	Description	Item Number
TLC 700	Basic Fold-Back-Thermometer	1340-5735A
TTX 200	Type T Core Thermometer	1340-5150A
FOM 330-1	Food Oil Monitor-Set	1340-2702A
CO 330	Reference oil for the Food Oil Monitor FOM 330	1341-2700
EBI 20-T1	Temperature data logger with internal temperature sensor	1601-0042A
EBI 20-T1-Set	Temperature data logger set (temperature logger, evaluation software, interface)	1601-0046A
EBI 20-IF	Interface for EBI 20	1601-0020
EBI 20-WM	EBI 20 wall bracket with padlock	1601-0030
EBI 20-WM-1	EBI 20 truck wall bracket	1601-0033
TLC 750i	Dual Infrared-/Fold-Back-Thermometer	1340-5736A
AG 121	Nylon Case for TLC 750i	1341-0624
AG 190	Drill for frozen food	1341-3834

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Let's Solve Water

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