

Flowing water style tester utilizing fish

(Patent pending) Model FT-100

TOXICITY TESTER BY FISH MODEL FT-100



- ★ Flowing water style enables long term testing.
- Stringent selection of material makes testing of environmental hormones possible.
- ★ JIS K0102 and OECD acute toxicity test utilizing fish taken into consideration.
- Easy unique measuring method obtains stable drug solution concentrations with little waste.
- * Non-pump construction reduces noise levels and is energy saving.
- ☆ Peace of mind with a full warning feature.
- ★ Models with various features using a touch panel available.

Flowing water style. Long term testing such as chronic testing is possible.

Overflow type test tank automatically prepares and supplies test water. This enables continuous testing with no bothersome exchange of water and minimum burden to the fish.

Meets standard for testing of environmental hormones. Wetted part uses only glass, stainless, and teflon.*1

From water intake to testing tank the wetted part is totally constructed of glass, stainless, and teflon materials.*¹ Tests for very small quantity of substances such as environmental hormones(exogenous internal secretion disturbance chemicals) that dislike elution and absorption is possible.

*1 : Parts after the test tank (drainage side) are constructed using other materials.

Designed with JIS K0102 and OECD acute toxicity test by fish in mind.

Naturally falling method without use of a pump. Will not damage test substance.

Natural falling liquid sending method will not affect the composition due to heat, friction, or pressure. Attenuated volume of dissolved oxygen can be kept to a minimum.

No need for bothersome maintenance of the pump such as exchanging seals, airing, or calibration of flow volume. Quiet operation.

[Start

Opens the

measurement]

solenoid valve for

measuring, and

pours water and

drug solution into

the measuring

vessel.

Saves energy because no monitor is used.

Easy to set up measuring and mixing method.

Uses a high performance photo electronic sensor and a solenoid valve to measure and automatically mix water and drug solutions in the tank.

It is possible to adjust the mixture ratio and change the drug solution concentration for each tank at will. This unique method provides superior visual recognition and concentration is easily set up.

No excess drug solutions are left because only necessary amounts are mixed and sent to the test tank.

Selection of water tank possible.

Selecting function/non-function of each tank according to operating conditions make it economical

Modular construction makes layout of the FT-100 fit into any location

Modular construction in which there are 3test tanks to a stand, so that it can be laid out to fit any location. In addition, test tanks modules can be added for customized uses.*2

*2 : Can not be rearranged by the User. Parts exclusively constructed according to specifications will be necessary.

Warning feature installed to warn of abnormalities

A buzzer and lamp will warn when insufficient water volumes and drug solutions make mixing impossible.

Also automatically stops mixing so concentrations in the other test tanks do not change. Safety is heightened for device that uses water with installation of distribution panel such as circuit breakers.



[Mix·supply]

Photo electronic

sensor detects

the liquid level

and closes the

solenoid valve for

measurement. It

solenoid valve to

measured water

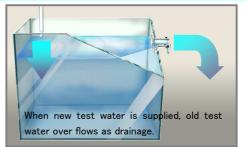
and drug solution to the test tank.

then opens the

send the

Models with various features using a TFT color touch panels available

Large, vivid color touch panel supports experiments with setup of parameter types and practical operation.



Uses

Tests on small fresh water aquatic life such as killifish for the following objectives

- Research of environmental hormones (exogenous internal secretion disturbance chemicals)
- Research of agricultural chemicals and processing of industrial drainage
- Research of chronic and acute toxicity
- Research of genotoxicity
- Research of creation and reaction of drugs
- Research of farming, breeding, and propagation

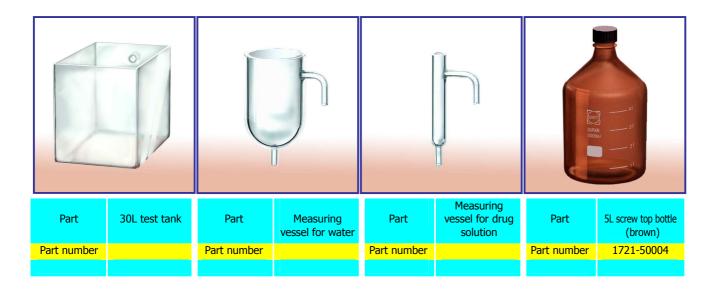
Specification

Model			FT-100	FT-100P	
Test subject			Small fresh water aquatic life		
Test substance			Solutions such as water solutions		
Mixture ratio adjustment range		stment range	1:10 ~ 150 (volume ratio)	1 : 5 ~ 300 (volume ratio)	
Water quality processing			None (Prepare processed water to supply and drainage equipment)		
Temperature adjustment			None		
Stand	Dimensions		2900W × 895T × 2150H *3		
Stanu	Material		Stainless (SUS304)		
Water	Capacity		90 L		
tank	Material		Stainless (SUS304)		
Test tank	vimensions(actual capacity)		260W × 410D × 305H (25 L)		
	Material		Glass		
	Pieces		6 pcs *3		
Measuring Part	Measuring method		Controls solenoid valve with photo electronic sensor that detects liquid surface		
	Water	Measuring	100 ~ 300 mL		
	mater	Material	Glass • Stainless (SUS316) • Teflon		
	Drug Measuring		2 ~ 10 mL		
	Solution	Material	Glass Stainless (Sl	Glass Stainless (SUS316) • Teflon	
Control panel	Ope	eration part	Switch operating method	4096colors SVGA model10 TFT color touch panel	
	Material (finish)		SS400 (Particle coating		
	Mixing cycle		200seconds/100seconds/continuous each concentration mixed at the same cycle	Manual set up/continuous Each concentration mixed at its Set up cycle	
	Operation mode		Single automatic operation mode of measuring ratio of 1time water to 1time drug solution	Manual maintenance mode and 4 automatic operation modes of 2times water to 1time drug solution 1time water to 1time drug solution 1time water to 2times drug solution Measures water only	
	Warning function		Warning with lamp and electromagnetic buzzer for measurement malfunction and insufficient tank volume.	Electronic buzzer warning and display on touch panel when solenoid valve and fluorescent light breaker function for measurement malfunction and insufficient tank volume.	
Light for test tank			20W fluorescent light ×2 *3 off / on	20W fluorescent light ×2 *3 off/automatic/manual (lights for set period during automatic)	
Intake configuration			Rp (PT) 3/4B female thread		
Exhaust port configuration			VU 50 A		
Used water volmue			33 L/h *3 *4		
Electric specifications			AC100V 50/60Hz 15A *3		
		pieces of test tapks			

*3 : Standard specification for 6pieces of test tanks.

 $\ast 4$: Standard for testing 5times/day using all test tanks.

Consumables



Prepare the following

Water supply

Continuous water supply over 35L/h is needed. The FT-100 does not include a water treatment function. Supply treated water as needed. (This is the standard specification when there are 6pcs of test tanks in use.)

Drainage

Prepare an exhaust port over 50A. The FT-100 does not include a drainage disposal function. Supply disposal equipment for drainage when necessary.

Power

Prepare an AC100V outlet with 15A ground or distribution panel.

Related products

Breeding water processing device

Continually produces breeding water for fresh water fish from a standard faucet.

Fish incubator

Device that will pull a syringe made of glass with a wire netting bottom up and down in the tank. Use with fertilized egg of fish in the syringe.

•Prices, specifications and external appearances published in the catalog are from December of 2003.•Improvements made to the product will change specifications and external appearances of the product without warning. •The color of the actual product will differ from the color in the catalog. •Prices published in this catalog do not include tax. •Please confirm the specifications of the product before placing an order.

SIBATA To place an order for this product contact

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