



PARASURE

INSTRUCTION MANUAL OF USE

Product Name :PARASURE ULTRASONIC DOSIMETER
Product Code :PS-2221
Purpose of Use :Monitoring of Ultrasonic Energy of Ultrasonic Cleaner

Routine Testing:

Steps for Use of Product

1. Select the appropriate number of PARASURE Dosimeter vials and as depicted in (Figure 1) to choose the layout that matches the size of the equipment to be tested.
2. Place the PARASURE dosimeter as indicated in (Figure 2) in an empty ultrasonic basket and place the basket in the ultrasonic cleaner that has been de-gassed.
3. Run the equipment as directed by the ultrasonic manufacturer and record the test results on the "LogSheet"
4. All PARASURE'S dosimeters should change from blue to yellow (see Figure2) within specified time. The time needed for the colour change will indicate the level of energy and degree of cavitation provided by the ultrasonic cleaner.
A change slower than average will indicate a weak spot.
A negative result will indicate a blind spot of ultrasonic energy.
5. Incase of an unsatisfactory result, refer to the PARASURE Quickguide.

Figure:1

Small Tank	Medium Tank	Large Tank
X	X X	X X X

Small Tank Up to 5 litres.F9
 Medium Tank 5 to 20 ltrs
 Large Tanks Above 20 ltrs

Figure:2



Interpretation of Results:

Colour changes from blue to yellow indicate the presence of cavitation energy.
 Time for colour change indicates the strength of cavitation energy.
 Failure for colour change to yellow indicates a failure to achieve sufficient cavitation energy to clean.
 Ultrasonic energy is localised and failure to achieve colour change may indicate one ,or more sonic transducers are failing.
 In the presence of very powerful cavitation energy, the colour of PARASURE liquid may go completely clear (no colour). This can be interpreted as a passed test.



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FAIL
Negative result
Insufficient energy



PASS
Positive result
Record according to
your quality policy

PARAMETERS	POSSIBLE REASONS	CORRECTIVE ACTION
Lowenergy (cycle time, trays, & load)	<ul style="list-style-type: none"> • Cycle time is too short, • The ultrasonic basket or the load may absorb too much energy 	<ul style="list-style-type: none"> • Test a longer cycle • Test cycle without load (functional test) and avoid wire mesh trays • Wire mesh trays absorb ultrasonic energy. Solid bottom trays are recommended
Water level	<ul style="list-style-type: none"> • Reflection of ultrasonic energy on the surface may change energy distribution 	<ul style="list-style-type: none"> • Refer to the instruction manual of instruments for correct water level
Degassing	<ul style="list-style-type: none"> • Dissolved gases in the water may absorb ultrasonic energy 	<ul style="list-style-type: none"> • Refer to instruction manual for a proper degassing
Transducers	<ul style="list-style-type: none"> • The efficiency of the transducers may decrease with age or individual transducers may be out of order 	<ul style="list-style-type: none"> • Re do the functional test and check the individual transducers

Disposal Considerations:

Disposal of the product is regionally differently regulated, therefore the kind of disposal is to be inquired at the responsible authorities.

Additional information: Disposal of this product should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

! As the temperature rises, the conversion time may extend.

Important reminders;

-The performance after a corrective action needs to be tested again with a new PARASURE.

-The Normal time needed for a colour change is below 6 min at 27kHz. But in the case of absorbed energy, time may take up several minutes.

PARASURE
Quick guide



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