

SHIPSAFE®

Marine Boiler & Cooling Water Test Kit

The MTS range of SHIPSAFE® marine boiler and cooling water test kits are designed to monitor water treatment chemicals added to diesel engine cooling systems and low, medium or high-pressure boilers. The SHIPSAFE® range of reagents supplied are non-hazardous for shipping and the products have been specially selected and combined into a range of specific, fully portable test kits for easy convenient testing on-site. Upgrades are available depending upon treatments used.

Engine cooling systems contain carefully blended additives that prevent scale deposits and corrosion of engine waterways. It is very important that the concentration is maintained at the correct level for optimum protection.

Low, medium and high-pressure steam boilers are also treated with special corrosion and scale inhibitors. It is vitally important to maintain precise levels of these additives to ensure correct and efficient steam generation. Failure to regularly maintain and monitor treatments will inevitably end in system failure and expensive corrective maintenance.

MTS supply treatment test kits for engine cooling water and steam boiler water. The kits are very simple to operate and will enable the ships engineer to monitor scale and corrosion concentrations. Regular testing will allow rapid corrective action to take place helping you maintaining optimum operating conditions, minimize downtime and reducing energy costs.



SHIPSAFE® Boiler and Cooling Water Test Kits

Contents	MTS-K100171 Marine Boiler Water Kit	MTS-K100171 Marine Cooling Water Kit	MTS-K100173 Marine Boiler & Cooling Water Kit
Plastic Case and Foam	•	•	•
Alkalinity (P) 0 - 2400 ppm (100 tests)	•		•
Chloride 20 - 12000 ppm (100 tests)	•	•	•
Nitrite 10 - 2000 ppm (100 tests)		•	•
pH Test Strips 4 - 10 (100 tests)		•	•
pH Test Strips 7 - 14 (100 tests)	•		•
Instruction Manual	•	•	•

Optional Upgrades

Product	Description
MTS-B100042	021 CON/TDS Stick Meter
MTS-B100178	DEHA 0 - 0.5 ppm
MTS-B100037	Glycol Refractometer
MTS-B100183	Hydrazine 0 - 5 ppm
MTS-B100174	Phosphate 0 - 100 ppm
MTS-B100180	Sulphate 0 - 200 ppm
MTS-B100352	Sulphite 20 - 150 ppm
MTS-B100181	Tannin 0 - 200 ppm
MTS-B100030	Suspended Solids 5 - 500 ppm

Spectrapak® 310 Options

Tablet count methods have been historically used in the marine industry. The tablet count process forces the sample water to change color based on the number of tablets added. The value can then be determined on a conversion table based on the number of tablets it takes for the color to change.

Tablet count methods are classed as hazardous for shipping and less accurate than the recently developed drop test methods. For non-hazardous options please refer to the SHIPSAFE® range of boiler and cooling water test kits.

Contents	MTS-K100606 Spectrapak® 310 Boiler Water Kit	MTS-K100437 Spectrapak® 309 Cooling Water Kit	MTS-K100749 Spectrapak® 313 DEHA Kit	MTS-K100960 Spectrapak® 312 Hydrazine Kit
Plastic Case and Foam	•	•	•	•
Alkalinity (P) Tablets (250)	••			
Chloride Tablets (250)	••	•		
Nitrite No 1 Tablets (100)		•		
Nitrite No 2 Tablets (250)		••		
pH Test Strips 4 - 10 (100)	•	•		
pH Test Strips 7 - 14 (100)	•			
Comparator Unit			•	•
Comparator Unit 10ml Cell			••	••
DEHA Test Solution (15ml)			•	
DEHA Test Tablets (30)			•	
DEHA Comparator Disc 0 - 0,5 ppm			•	
Hydrazine Comparator Disc 0 - 5 ppm				•
Hydrazine Test Powder (40g)				•
Instruction Manual	•	•	•	•

Chloride Test Kit for Cooling Water Treated with Glysacorr® G94-94

Glysacorr® G93-94 is an inhibitor concentrate which is added to the cooling water in trucks, locomotives, on ships, or other combustion engines. At a concentration of 10% by volume, Glysacorr® G93-94 affords excellent protection against cavitation and corrosion to all engine metal and alloys, providing that chloride levels in the cooling system remain below 100ppm (mg/l).

The coolant mixture should be prepared with tap, demineralized or deionized water. If tap water is used then it is essential that chloride and hardness levels are below

the recommended maximum concentrations; 100ppm (mg/l) and 360ppm (mg/l) respectively. Regular monitoring of chloride is essential to ensure no sea water contamination occurs during operation.

The MTS Glysacorr® chloride test is specially designed to determine chloride levels in 10% working inhibitor solution, ensuring optimum conditions for corrosion protection. A hardness test is also available to ensure dilution water used stays within specification.

Contents	MTS-K100606 Spectrapak® 310 Boiler Water Kit	MTS-K100437 Spectrapak® 309 Cooling Water Kit	MTS-K100749 Spectrapak® 313 DEHA Kit	MTS-K100960 Spectrapak® 312 Hydrazine Kit
Plastic Case and Foam	•	•		
Chloride Reagent A (30ml)	••		••	
Chloride Reagent B (65ml)	•		•	
GF/C Filter Papers (50)	•		•	
Filter Holder	•			
Comparator Unit	•			
Comparator Unit 10ml Cell	••		••	
Glysacorr® Comparator Disc 0 - 100ppm	•			
2ml Syringe	•		•	
10ml Syringe	•		•	
20ml Syringe		•		
10ml Tube with Cap		•		
TH2 Total Hardness Buffer (65ml)		•		•
TH3 Total Hardness LR Titrant (65ml)		•		•
TH4 Total Hardness HR Titrant (65ml)		•		•
TH5 Total Hardness Indicator (65ml)		•		•
Titration Jar (60ml)		•		
Instruction Manual	•	•		

The Bruusgaard System



TBS is a unique turnkey portable gas detection solution, giving you increased safety and substantial cost savings through standardised instruments, routines, training and procurement.

Logistic Support

At any given time we know the status of all vessels and sites covered by The Bruusgaard System. We consolidate all shipments and make sure you have everything you need on board until next scheduled delivery. This results in fewer shipments and substantial savings!

- Year round follow up of instruments, spares and consumables
- Handling of all shipments & logistics
- Annual reports per vessel including budgeting



Safety

QA – strict routines and logging

- Crew are able to use instruments and follow routines correctly
- Instruments are in proper working condition at all times
- Instruments are calibrated at correct intervals
- Sensors and other items are replaced at correct intervals
- Usage of instruments is logged, including abnormal observations
- Traceability – instrument history and usage
- Routines and procedures can merge into the overall QA-system

Effective and proven training is an integrated part of The Bruusgaard System.

Instruments

All the equipment used for gas detection and calibration is placed in a custom-made wall cabinet. Including Log & Instruction Manual, which are crucial to maintaining the safety integrity.

- Standardised vessel specific gas detector solutions
- Total solutions including all equipment and routines necessary for efficient and safe use, storage and maintenance

Cost Savings

Some of our customers have been able to go from 8 to 10 suppliers down to 1 – translating into cost savings of up to 40-50%. For one vessel, this could be thousands of dollars annually, and for a whole fleet, the cost savings can be dramatic. This is achieved through:

- One contact for worldwide supply of spares & gases
- All service and calibration can be done on site.
- Reductions of instrument types from 10-12 to 2-3

Reduced maintenance costs through:

- On board calibration
- Fewer instruments on board
- No need for spares on board
- One PO per year
- Increased safety
- Less use of administrative time