

Insatech Scrubber Caustic Test Kit

Determination of % caustic when bunkering

Both IMO and EU policies require ship operators to reduce the sulphur emissions of their ship operations. Vessels operating in a Sulphur Emission Control Area (SECA) need to use either low Sulphur distillate fuels or have an approved exhaust gas treatment system installed onboard to capture sulphur emissions.

For those ship owners and operators who have opted for exhaust gas treatment option, the installation of wet scrubbers is becoming an increasing trend. Wet scrubbers can operate in 3 modes, open loop, closed loop and hybrid mode which is a combination of both open and closed loop.

When vessels are operating in SECAs, closed loop scrubbing is required. In order to maintain alkaline levels in the scrubbing water, and as either fresh or sea water pH range can be 6.5 - 8.5, for the effective scrubbing Sodium Hydroxide (NaOH) in a 50% solution is commonly used.

This product is usually bunkered onboard via the vessel's dedicated bunker lines via road tanker or by delivery in drums and IBC's.

The determination of the % of caustic solution is critical for ship operators as dosing rates and system set up is setup according to the specific % of caustic used.

Problem resulting from off-spec caustic are:

- A lower % caustic solution will lead to increased consumption and costs.
- A lower % caustic solution may affect the scrubbing performance and thus lead to the vessel failing to remain within its emission requirements.

This kit has been developed to simply and quickly allow the crew to sample and analyse the caustic soda during bunkering in order to validate the % solution supplied matches the supply specification and if not to adjust system dosing accordingly or reject delivery.

Specifications	
Contents	 1 × IP67 MAX Marine & Offshore Case & Foam Set 1 × Digital Scale 1 × Sampling Equipment 1 × Set of PPE 1 × instruction manual
Range	1 - 50% Sodium Hydroxide (Caustic Soda - NaOH)
Dimensions	47 cm (L) × $37 cm$ (W) × $18 cm$ (H)
Weight	5 Kgs
Shipping	Non-hazardous for shipping

Health and Safety

No Material Safety Data Sheet is applicable for this product.



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