

ECOSOLUT[®] 24

Multi-Purpose, Solvent-Free, Neutral Cleaner Concentrate

Case Study

Superior Cleaning Across Range of Persistent Hydrocarbon-Based Cargoes

- ▶ Vegetable Oils, e.g. Palm Kernel Oil (PKO)
- ▶ Hydrocracker Bottoms (HCB)
- ▶ Linear Alpha Olefins (LAO)
- ▶ Fatty Acid Methyl Ester (FAME) from Soya-Bean Oil
- ▶ Pitch Tall Oil (PTO)

Effective With All Common Substrates

- ▶ Zinc Silicate Coated Mild Steel
- ▶ Stainless Steel 304 (SS)
- ▶ Epoxy Phenolic (EP)

Usage

- ▶ Recommended use concentration only 0.5 – 1%
- ▶ Recommended water temperature only 60°C
- ▶ Reduces both the number and quantity of cleaning chemicals required on-board

Introduction

The technical data sheet "A New Standard in Vegetable Oil Tank Cleaning" highlights ECOSOLUT 24's effectiveness. This product outperforms a leading competitor in cleaning various hydrocarbon-based cargoes. Its pH-neutral nature ensures it's safe for different coatings and offers excellent cleaning performance on common substrates. For more detailed information, please refer to the technical data sheet available at this [link](#).

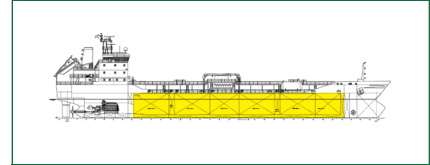
Performance Comparison of Neutral Cleaner Concentrates: ECOSOLUT 24 vs. Established Market Competitor.

Testing was done in an independent test laboratory. In brief, the test protocol involved:

- ▶ Immersing test panels in the cargo chemical for 48 hours
- ▶ Allowing them to drain as they cooled to ambient, leaving an even film of solidified oil on the surface
- ▶ Washing for 2 hours in recirculating 0.5% freshwater cleaning solution at 60°C
- ▶ Rinsing the washed plates with ambient freshwater then allowed to dry
- ▶ Rinsing the dried plates with organic solvent to extract residual cargo remaining on the plates
- ▶ Analysing the organic solvent extract to quantify the extracted cargo content.

The data below shows that ECOSOLUT 24 gives cleaning performance superior to an established market competitor across a range of cargoes.

USAGE AREAS



Tank Cleaning and Maintenance

PACKAGING



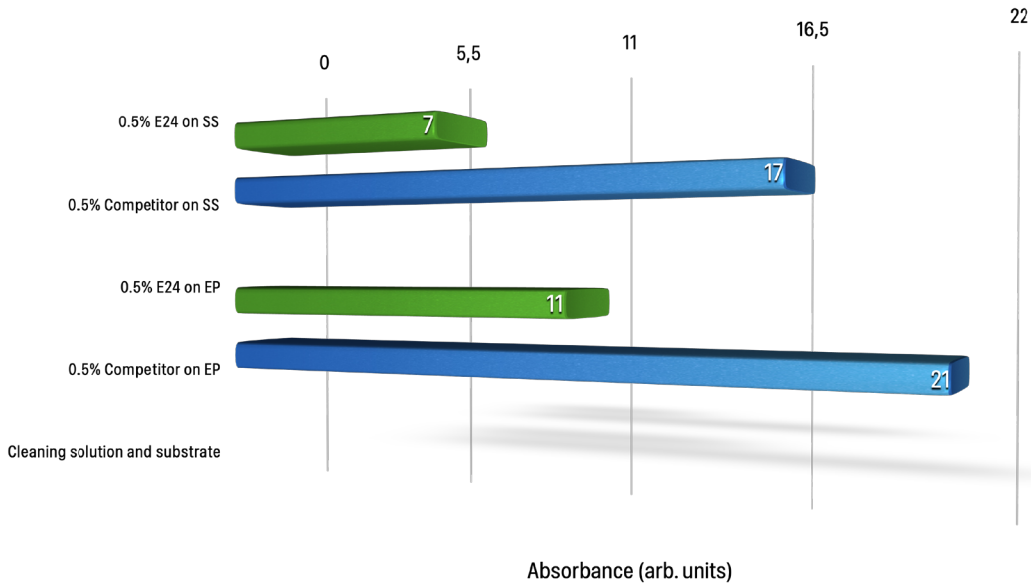
APPROVALS



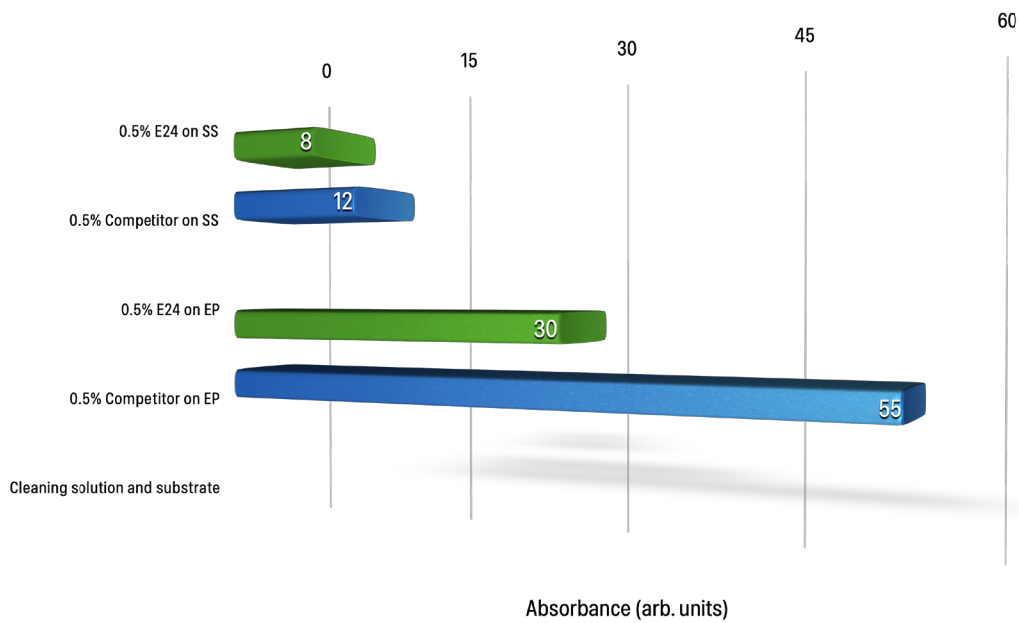
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Linear Alpha Olefin (LAO) residue after 2 hours cleaning @60°C



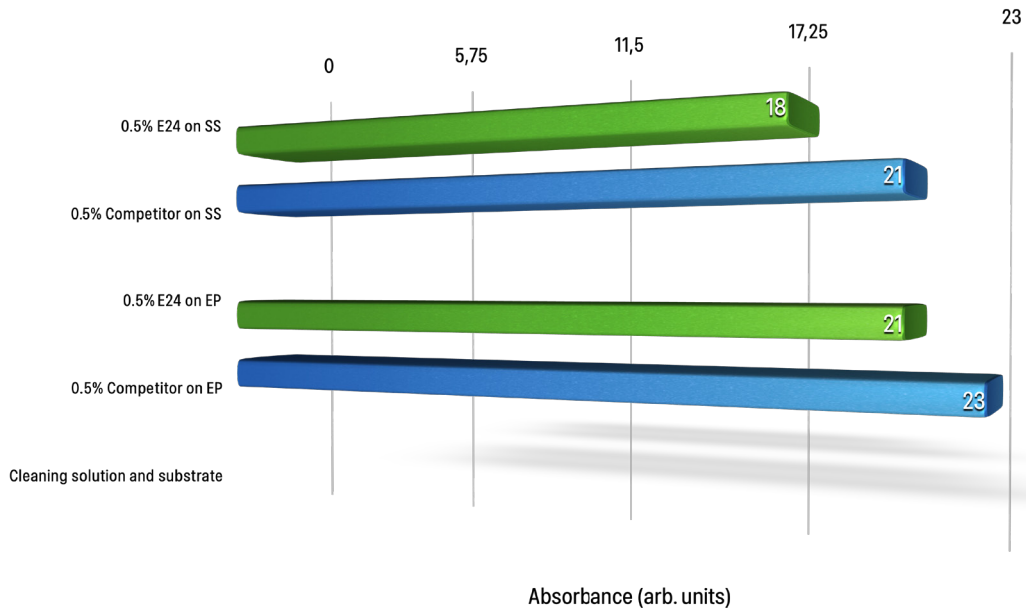
Fatty Acid Methyl Ester residue after 2 hours cleaning @60°C



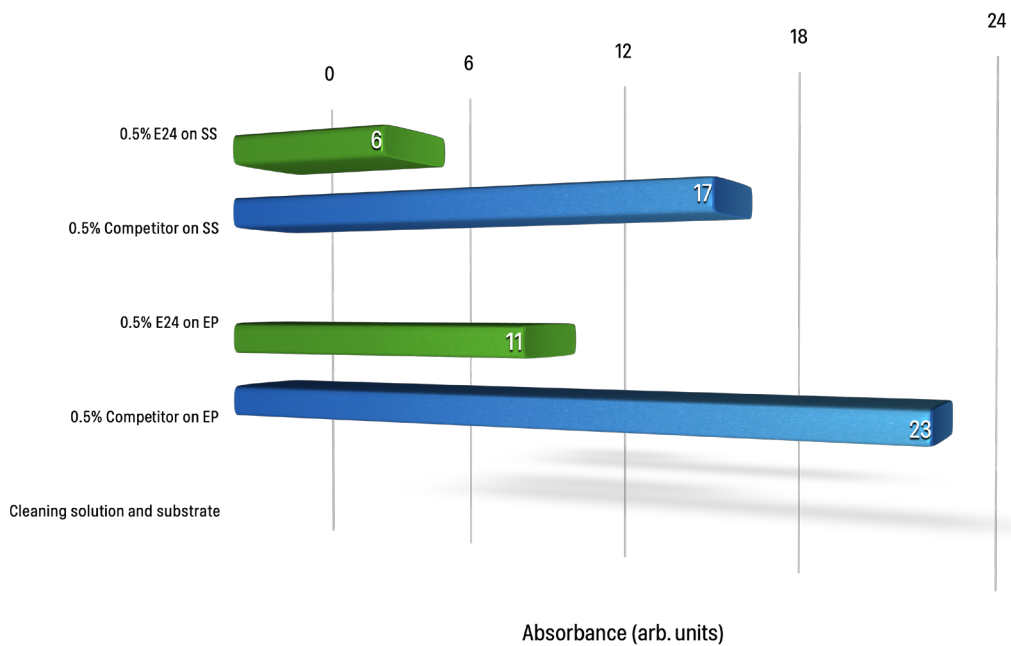
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Hydrocracker Bottoms (HCB) residue after 2 hours cleaning @60°C



Pitch Tall Oil (PTO) residue after 2 hours cleaning @60°C



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Important Notice

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Approvals

ECOSOLUT 24 has been independently tested and approved by leading coatings companies under the most stringent cleaning conditions. ECOSOLUT 24 is an IMO registered Cargo Tank cleaning additive in MEPC.2

Contact

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