

Cargo Tank Coatings Range

Maximising operational flexibility and profitability





**Engineered
for change**

In this rapidly changing market with the growth of global energy, chemical and food requirements, the chemical trade continues to expand, placing increasingly stringent demands on vessel owners and operators.

Around 70% of cargo tanks in the global fleet are constructed from mild steel. These tanks need to be protected from corrosion and from the carriage of often very aggressive cargoes. Coatings play a critical role in tank protection.

The ability to switch from one cargo to the next easily, with minimal downtime and tank cleaning, is key to the successful and profitable operation of chemical and product tankers. It is the choice of coating that determines the ease with which this can be done.

Different coatings absorb, desorb and retain cargoes in different ways depending on the coating type, the cargo in question, the temperature, duration of carriage and so on.

Absorption of cargoes into the tank lining, can in turn lead to subsequent cargo contamination which can occur as a

result of the transport of small quantities of a previous cargo into the next one.

The challenge for cargo sequencing then becomes one of cleaning and recovery in order to return the coating to an acceptable condition ready for the next cargo.

Tank cleaning operations are increasingly coming into the spotlight with tightening regulations governing permissible cleaning methods and materials. Also, depending on the specific trade patterns and coating type, cleaning can lead to significant expenditure in terms of time and money.

Understanding these market dynamics and by working closely with our customers, we are able to offer tank linings that deliver a wide range of cargo compatibility, operational flexibility and corrosion protection – for every cargo sector.





40 years' experience and expertise

With over 40 years' experience in chemical and product tanker coatings, we continually evolve our product offer to meet the changing needs of the industry.

Developed in dedicated tank lining laboratories by our team of expert chemists, our aim is to move beyond established technologies and to deliver coatings that increase vessel operating flexibility, cut cleaning times and open up new trading opportunities for our customers.

All products are rigorously tested throughout development to ensure optimum performance of coatings in service. Coupled with the support of our 800 strong global technical service network, on hand at application from surface preparation to the finish coat, you can be sure your vessel is in safe hands.

Our Cargo Resistance Guide (CRG) can assist in selecting the most suitable coating to meet your individual operational requirements. Whether transporting edible vegetable oils such as sunflower oil, industrial feedstocks, methanol or refined petroleum products, we have a product solution to meet your needs.



The complete range

With a track record of over 2,000 tank lining applications and proven in service performance our Interline® range enables the carriage of a wide range of cargoes to maximise operational flexibility and earning potential.

Whether operating a chemical or product tanker, we have product solutions to meet your operational and performance expectations.

All our products are formulated to give the lowest absorption and retention characteristics in their respective classes, reducing the risk of cargo contamination and opening up new trade opportunities.

Interline®9001

Featuring our new 'Bimodal Epoxy' technology, Interline®9001 provides zero cargo absorption for many cargoes. Our smoothest tank lining yet, its glossy surface makes tank cleaning easier and up to 70% quicker, reducing fuel requirements, and achieving corresponding cost and CO₂ emission savings.

With enhanced cargo resistance, it offers a step change in performance compared to standard epoxy phenolic technology.

Offering over 60% fewer cycling restrictions, it is suitable for carrying all of the cargoes that epoxy phenolic can, plus a further 25% of the large volume cargoes that it cannot, meaning enhanced earning potential. In addition, a low volatile organic content (VOC) and 80% volume solids helps to enhance your overall environmental profile.

Interline®994

Our epoxy phenolic tank coating, Interline®994, is designed for the carriage of an extensive range of aggressive cargoes, providing operational flexibility within the chemical and spot market product trades. Offering excellent chemical resistance and USA FDA / EU Food Contact compliance.

Interline®904

Interline®904 is a polyisocyanate cured, high performance epoxy. With a broad range of cargo carriage (including acrylonitrile) and sequencing, it provides operational flexibility within the chemical and spot market product trades. Full chemical resistance is achieved without the need for post curing.

Interline®704

Interline®704 is the industry benchmark in pure epoxy technology for product tankers, providing good chemical resistance for flexible cargo carriage and meeting FDA regulations for carrying liquid foodstuffs into the USA, combined with a proven track record of over 20 years.

Interline®344

Interline®344 is a zinc silicate coating designed for vessels engaged in the neutral solvents and chemicals trade. It allows more efficient tank cleaning operations, control of VOC emissions and improved mud-cracking resistance.

Also available are **Interline®624** and **Interline®644**, our solvent free cargo tank coatings, offering required cargo carriage capabilities and yard regulatory compliance.

Product development and support

Coating development

In our dedicated tank coating laboratory, accredited to ISO9001:2000, our specialist team develops new, leading edge coatings in a purpose-built environment, as well as refining existing products to meet changing market demands. The testing of cargo resistance, aggressive cargo sequencing and corrosion protection is carried out to simulate in-service conditions, ensuring that our products meet the highest quality standards.

Practical application and in-service trials

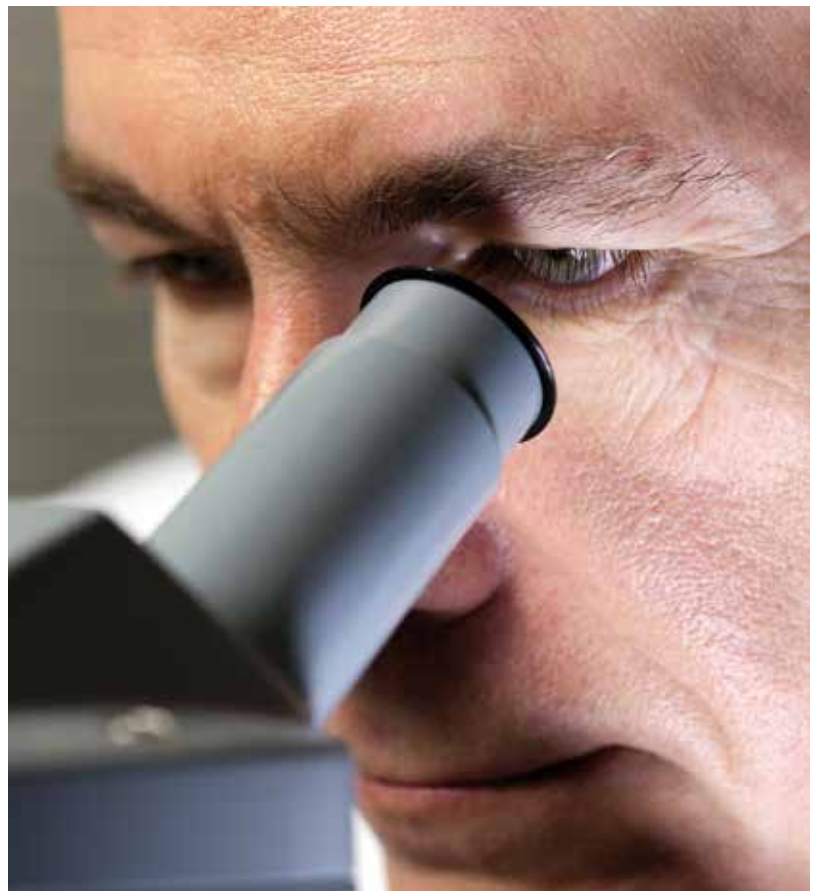
Following stringent internal testing procedures, new products are applied in practical situations to assess their application, handling and performance characteristics, providing confidence in their suitability and fitness for purpose.

Tank coating application and technical service

Tank coating application is highly complex, so attention to detail is critical throughout the process, from steel preparation and abrasive blasting to final inspection. Our highly trained and experienced technical service representatives work to specific application procedures to ensure maximum coating lifetime and optimum performance in service.

Cargo Resistance Guide (CRG)

An easy to use application that allows you to search for all information relating to the carriage of liquid chemicals and petroleum products, our comprehensive CRG covers several thousand cargoes that we constantly update to include new chemicals entering the market. Available online, as a CD ROM or hard copy, the CRG contains specific advice relating to individual coatings together with guidelines for cargo sequencing and safe carriage.



International is the brand of AkzoNobel's Marine and Protective Coatings business. AkzoNobel is a leading global paints and coatings company and a major producer of specialty chemicals.

Global Headquarters
International Paint Singapore Pte Ltd
21 Tuas South Street 3
Singapore 638023

Call: +65 6594 8800

Fax: +65 6594 8897

Send an email:

marine.communication@akzonobel.com

Visit our website:

www.international-marine.com/cargotanks

Sign up to keep up to date with our latest news visit

www.international-marine.com/signup




Important Notes:

All representations and statements concerning the product(s) in this publication are accurate to the best of our knowledge. Statements made in this publication are advisory only and are not intended to be specific recommendations or warranties of any kind. To the extent permitted by law, we do not accept any liability to any person for any loss or damage (direct or indirect) that may arise from any use or reliance on any of the methods or information contained in this publication for any purpose.

Unless otherwise agreed in writing, all products supplied and technical advice or recommendations given are subject to our Conditions of Sale.

For each of our products the relevant Product Data Sheet, Material Safety Data Sheet and package labelling comprise an integral information system about the product in question. Copies of our Product Data Sheets and Material Safety Data Sheets are available on request or from our website: www.international-marine.com

 and International[®] and all products mentioned in this publication are trademarks of, or are licensed to, AkzoNobel. © AkzoNobel 2016



This brochure is:



Fully recyclable and biodegradable

ECF

Elemental Chlorine Free



ISO 14001
Produced at a mill that holds ISO 14001 certification



When you have finished with this brochure, pass it on to a colleague or recycle