

Fuel challenges  
don't wait.  
Let's act today for  
a sustainable future



# Introduction of Aderco

## WE ARE PIONEERS

While researching **40 years** ago how to improve the fuel efficiency, operational reliability and environmental profile of the North American icebreaking fleet, we discovered a **unique plant molecule** with exceptional **surfactant** properties.

## WE ARE BOLD

With faith in the limitless potential of this technology, we set out to develop fuel treatment products that provide immediate and simple solutions to complex fuel quality problems.  
A **winning solution.**

## WE ARE VISIONARY

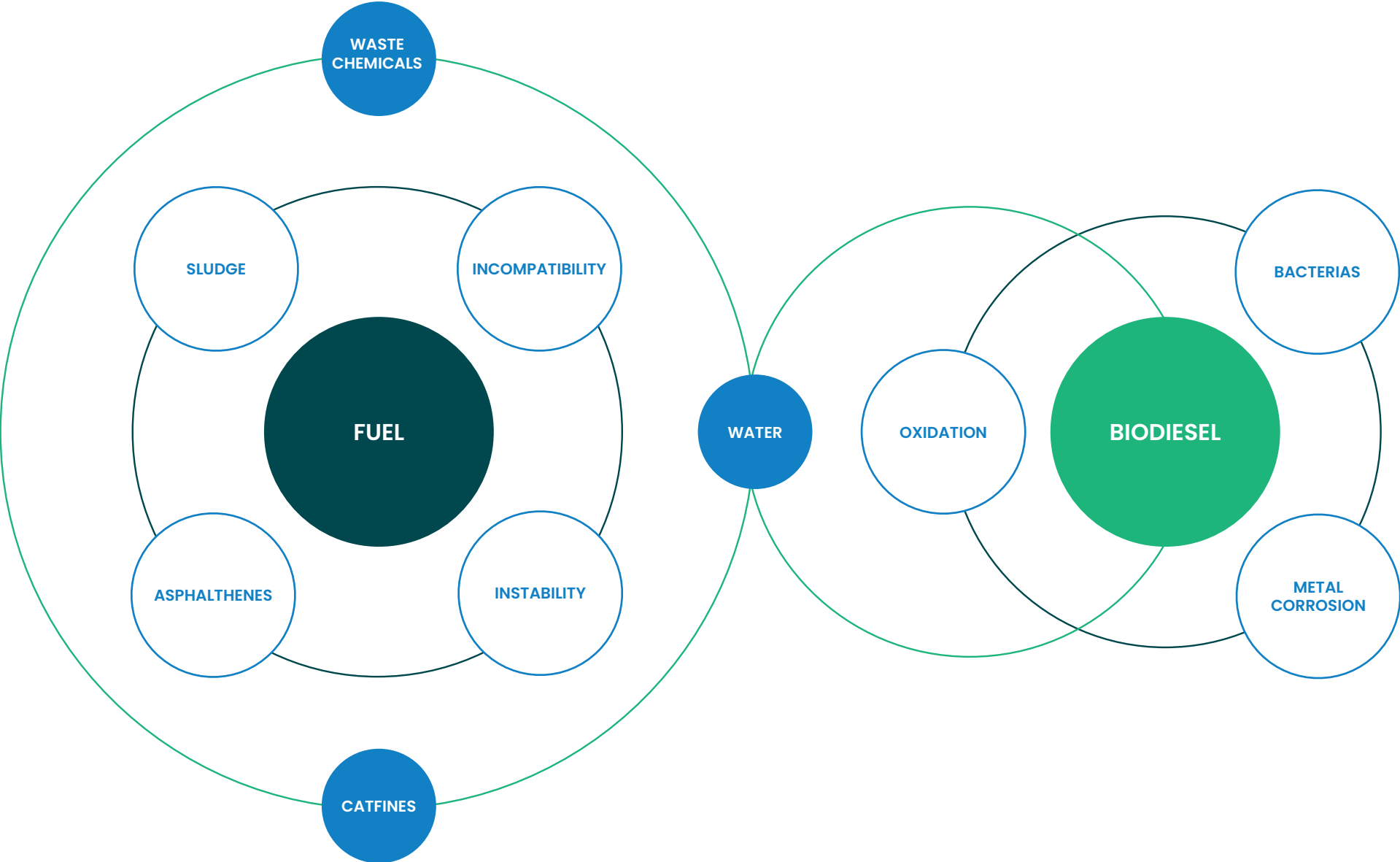
By adapting and delivering ever more sustainable solutions in the maritime industry, we are helping them to meet the challenges of tomorrow.

## WE ARE ADERCO

Fueling innovation for the next generations.



# Fuel Issues Library



	FUEL PROBLEMS	POTENTIAL ISSUES
VLSFO	<ul style="list-style-type: none"> <li>· Composed of numerous and geographically dependent blends of many refined fractions.</li> <li>· Characterised by a wide fluctuation of Viscosity, Density, Net Calorific Values, among others.</li> <li>· Composed of heavy aromatics blended with paraffinic content where the paraffinic part is the majority to reduce the sulphur content.</li> </ul>	<ul style="list-style-type: none"> <li>· Fuel Stability</li> <li>· Fuel Incompatibility</li> <li>· Contamination</li> <li>· FAME Content</li> <li>· Water and Cat Fines</li> </ul>
HFO	<ul style="list-style-type: none"> <li>· Made of residual fraction from refinery operations.</li> <li>· Used together with scrubber for marine vessels.</li> <li>· Composed of heavy aromatics blended with paraffinic content where the aromatic part is the majority.</li> </ul>	<ul style="list-style-type: none"> <li>· Fuel Stability</li> <li>· Fuel Incompatibility</li> <li>· Water and Catfines</li> <li>· Scrubber Maintenance</li> <li>· Combustion</li> </ul>
BIOFUEL	<ul style="list-style-type: none"> <li>· Made of either vegetal or animal raw materials such palm/rapeseed oils or animal fats.</li> <li>· Available in pure biofuel form (B100) or blended with diesel or VLSFO to create biofuel blends (e.g. B30).</li> </ul>	<ul style="list-style-type: none"> <li>· Fuel Oxidation</li> <li>· Bacterial Contamination</li> <li>· FAME Content</li> <li>· Acidity Levels</li> <li>· Fuel Degradation</li> </ul>
MGO/ULSFO	<ul style="list-style-type: none"> <li>· Used in ECA/SECA area where 0.1% sulphur limit is imposed.</li> </ul>	<ul style="list-style-type: none"> <li>· Fuel Oxidation</li> <li>· Lack of Lubricity</li> <li>· Water Contamination</li> <li>· Bacterial Contamination</li> <li>· FAME Content</li> </ul>

## SOLUTION





































# Fuel Problem Matrix

 2055G  L1050

	VLSFO	HSFO	BIOFUEL / B30 / VLSFO B30	MGO	ULSFO	REMARKS
Stability						
Incompatibility						
Oxidation						
Catfines						Settle to the tank bottom for removal through water drainage
Water						Regular draining of the tanks
Microbial growth						
Sludge						
Chemicals	 *	 *	 *			Assist in diluting the effects of chemicals to a certain extent.
Pour point	 *	 *				Assist in homogenising.
Lubricity						Sulphur limit below 0.4% is encouraged to add lubricity improver to prevent excessive wear and tear before planned maintenance period.

\*indirect Aderco Action (please contact our technical team for further information)



# Key Characteristics

- 100% vegetal-organic, ashless, solvent-free and metal-free
- Classified as non-hazardous – no transport restrictions (flash point:  $\geq 146^{\circ}\text{C}$ )
- Compatible with HFO, Hybrid, VLSFO, MGO/LSMGO/ULSGO, Biofuel
- REACH Compliant, DNV-DG Statement of Fact, EPA Registered

## DOSING INSTRUCTIONS

- Initial dosage 2 litres per 55 metric tonnes of fuel
- Subsequent dosages 1 litre per 55 metric tonnes of fuel

To be poured into the main fuel tanks or double bottom tanks through the feed-line, straight in the tank top through the manholes/pipes in the storage tank before bunkering.

As soon as Aderco fuel treatment is introduced into the fuel, surfactant technology benefit kicks in and the fuel is protected. Regularly check the fuel separator, watch the filters and drain the settling tank for the first week.

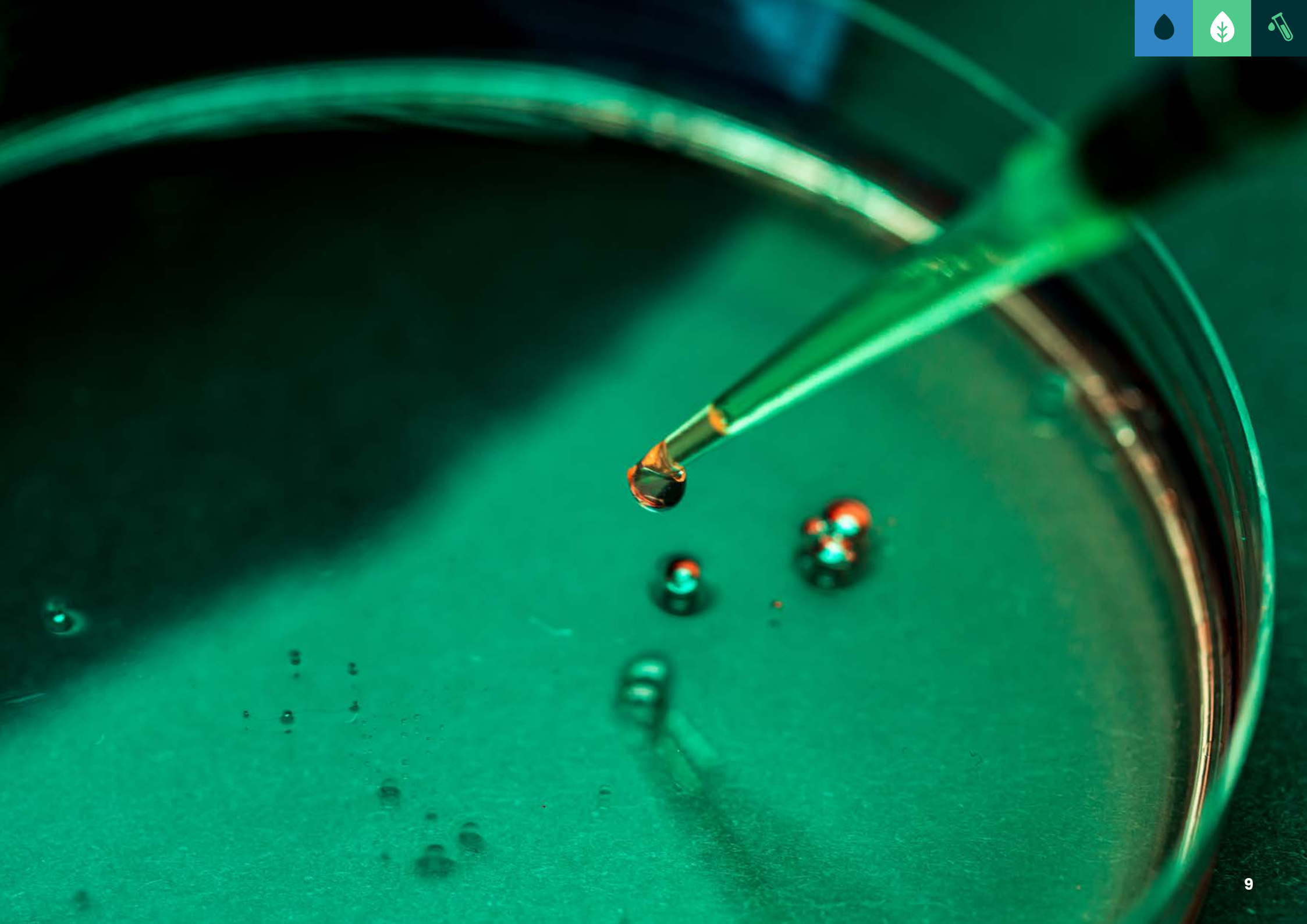
VLSFO

HSFO

BIOFUEL

MGO

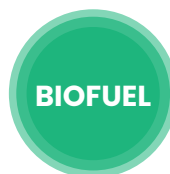
ULSFO





# Key Characteristics

- Protects high-pressure fuel pumps and injectors by reducing friction between fixed and moving parts
- Eliminates risks associated with high wear and tear from the fuels
- Wear Scar Diameter well below damage threshold when using Aderco (refer to HFRR test results)
- No troublesome gum deposits, protects against corrosion
- Prevent risk of unexpected engine shutdown/ breakdown
- Risk-free for engine (no FAME) – FTIR- tested

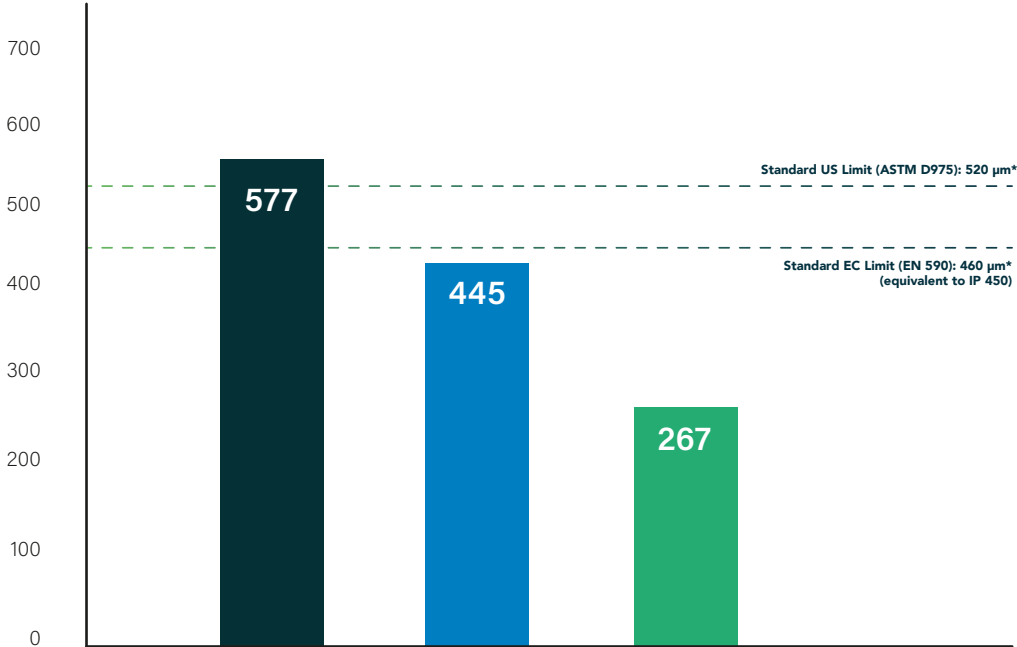




# For 2 stroke and 4 stroke engines

HFRR TEST - ULSGO @ 60°C (values in micrometres - µm)

Same dosage procedure as Aderco 2055G



**\* Wear Scar Diameter - Damage Theshold**  
High Frequency Reciprocating Rig (HFRR) Test conducted by independant testing and certification institute SGS  
(Method: ISO 12156-1)

- Untreated sample (no L1050)
- Standard Aderco L1050 Dosage 1:30
- Extra Aderco L1050 Dosage 1:20



# Stock points



# SUSTAINABLE DEVELOPMENT GOALS

As a leading company in our sector, we believe it's important to not only share our values but to live them out also. Sustainability is one of the key topics and issues that we endeavour to address, both internally in terms of our culture and products, and externally with our customers, suppliers and partners. We're committed through our entire operations to making progress toward a more sustainable future with concrete solutions that serve both our customers and the common good. Aderco is supporting 6 of the 17 Sustainable Development Goals (SDGs) in our daily activities. Find more information on our website.

**3** GOOD HEALTH  
AND WELL-BEING



**5** GENDER  
EQUALITY



**14** LIFE  
BELOW WATER



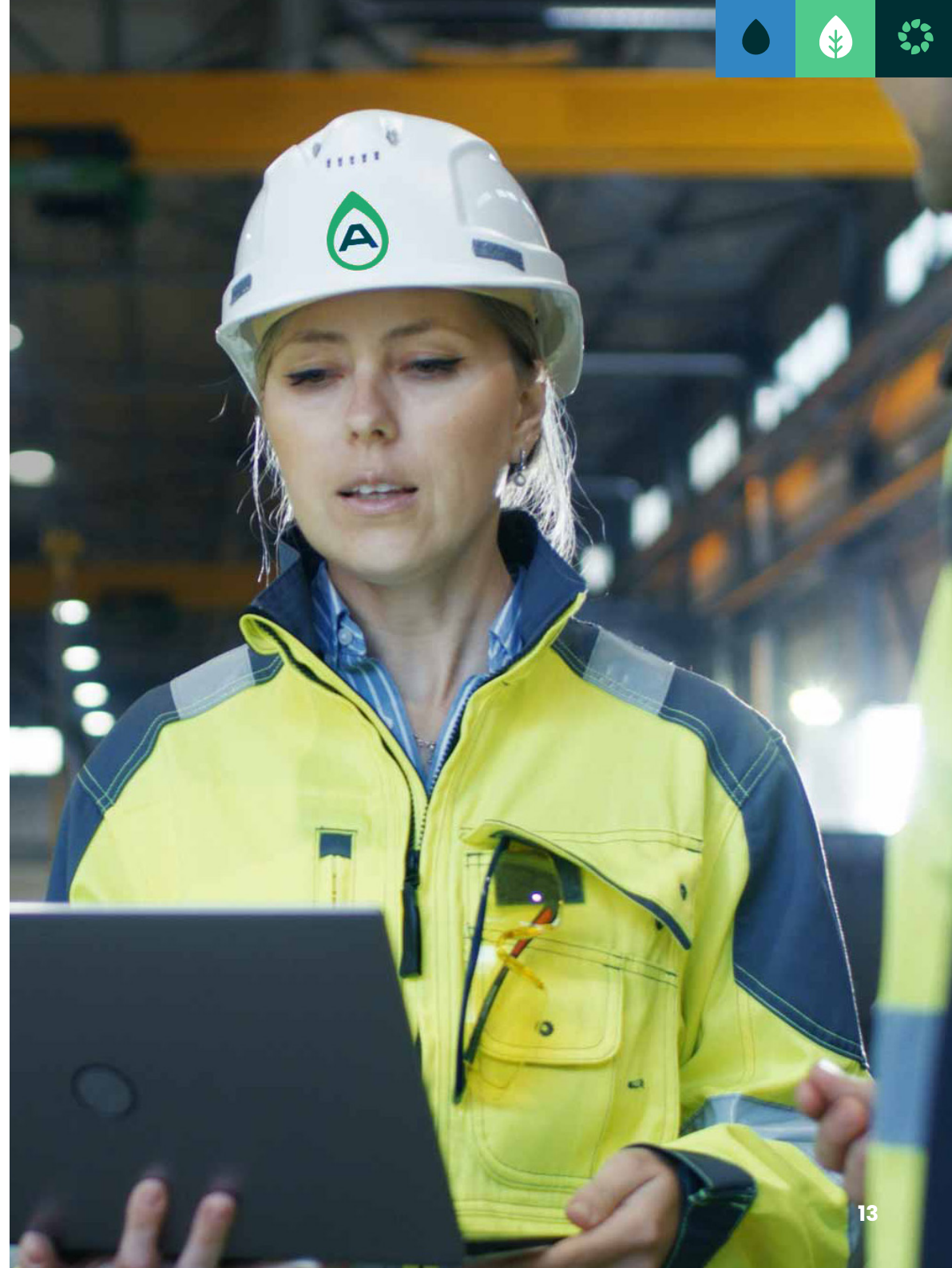
**9** INDUSTRY, INNOVATION  
AND INFRASTRUCTURE



**13** CLIMATE  
ACTION



**15** LIFE  
ON LAND



# Our 4 objectives



## PEOPLE & COMMUNITIES

From our teams to our customers, people are the centre of our activities. We aim to create value to each person connected to your business and we are really proud to support equality and diversity.



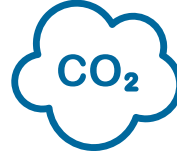
## POSITIVE PRODUCT

In addition to being an environmentally positive product by limiting NOx emissions and using low sulphur fuel, Aderco is committed to finding solutions to reduce its quantity of plastics for our packaging by using recycled plastic.



## ECOSYSTEM PRESERVATION

Aderco is really concerned about innovation for our environment and even more for our ecosystem.



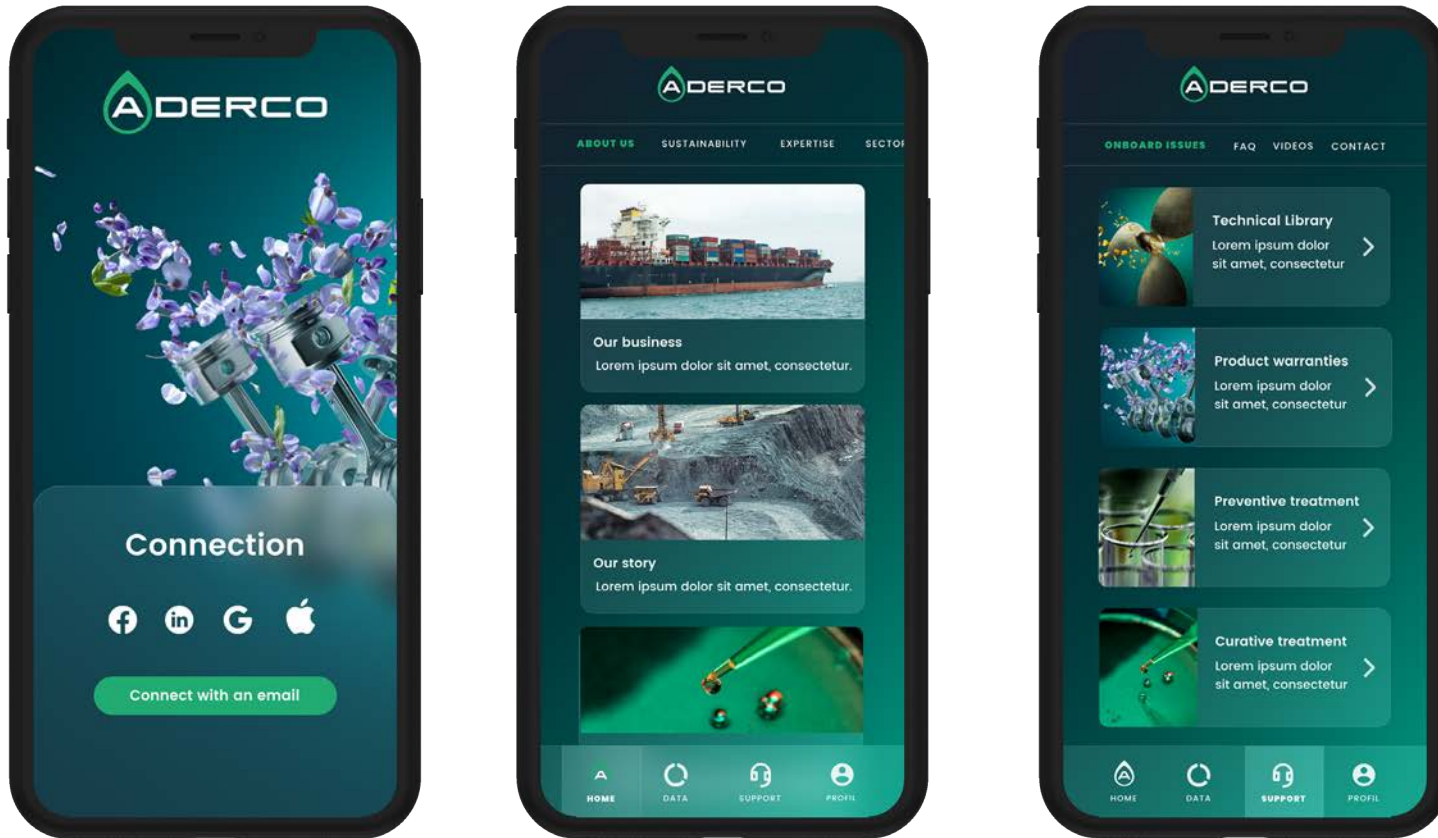
## CLIMATE CHANGE

Reducing emissions and improving energy is one step towards a more sustainable community.

# Aderco Supports



# Aderco Marine App



## DOWNLOAD THE ADERCO APP



The Aderco App provides integrated technical customer support, which fits nearly in your pocket, as well as access to Aderco's extensive knowledge and expertise when time is of the essence. The App also features fuel oil specifications data for main ports, powered by Veritas Petroleum Services (VPS).



[www.aderco.com](http://www.aderco.com)

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**Download the Aderco app :**

