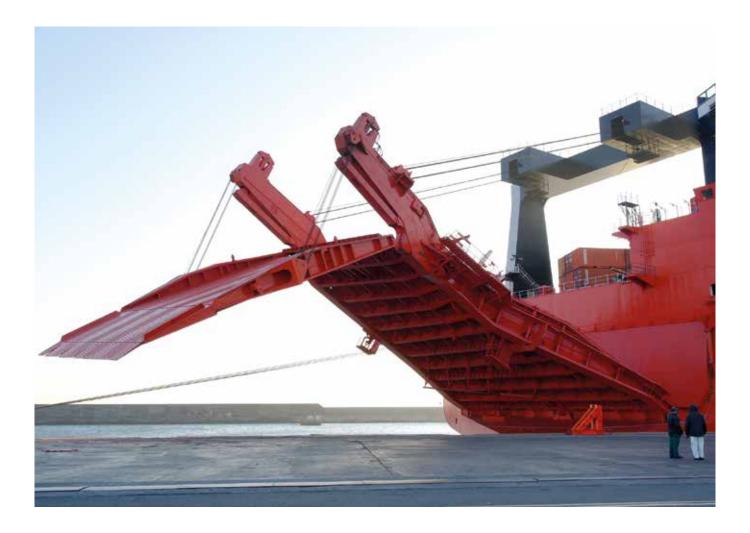
MacGregor Green Grease

The environmentally-friendly lubricant choice for your RoRo equipment



At your service





MacGregor Green Grease, part of our Green Ocean lubricant range, is an eco-friendly synthetic lubricant, ideal for use with your MacGregor and non-MacGregor RoRo equipment. Developed to ensure compliance with US environmental Protection Agency (EPA) Vessel General Permit (VGP) legislation, Green Grease is a certified environmentally acceptable lubricant (EAL). It is biodegradable and delivers all of the advantages of a synthetic lubricant.

Product features

- High load capacity
- Good water resistance
- High corrosion protection
- High wear protection
- Good adhesion and sealing properties
- Suitable for central lubrication systems

Suitable applications

- Wire lubrication
- Wire-sheave bearings
- Hinges
- Low-speed roller bearings
- High-load roller bearings

Advantages

- Can be applied manually as well or via central lubrication systems
- Extended lifetime of equipment due to low wear rates
- Good corrosion protection
- High load capacity
- Good adhesion and sealing properties

Protecting the marine environment

As an EAL, Green Grease has been formulated to have the lowest possible impact on the environment throughout its lifecycle, from production through to disposal. This includes a sustainability check for its composite raw materials and how it behaves when in use in the marine environment.

MacGregor advantages

- Delivered with a MacGregor guarantee
- Support from our extensive global service network



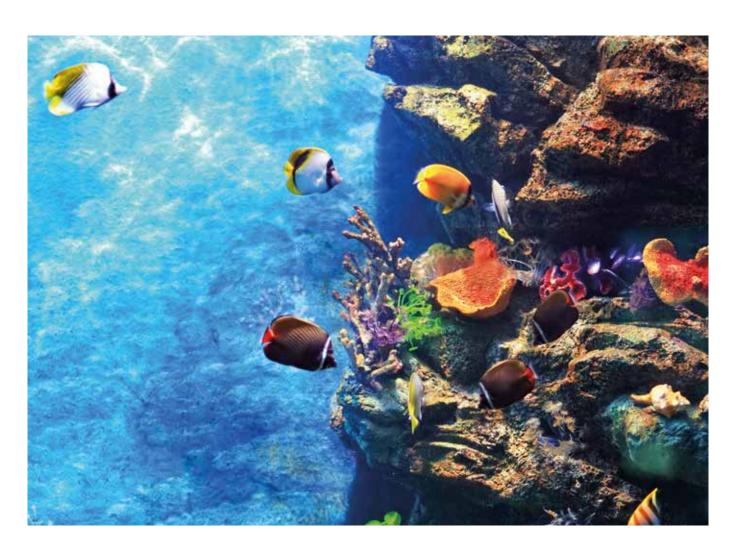
Technical information

Properties	Value	Unit	Standard
Colour	natural colour		
NLGI class	1		
Worked penetration at +25°C	310-340	0.1mm	ASTM D 217
Dropping point	>170	°C	IP 396
Water content	max. 0.01	weight -%	DIN 51 0802
Emcor-Test (sea water)	0/0	corrosion grade	DIN 51 8002
Behaviour towards water 5h/+90°C	0.90		DIN 51 807-1
Flow pressure @-30°C	<500	mbar	DIN 51 805
FB - ok-load Gutlast FB - welding load	2,800 3,000	N	DIN 51 350-4
FB wear value, 300N/1h	<0.5	mm ²	DIN 51 350-5
Copper corrosion 3h/+120°C	1	corrosion grade	DIN 51 825
Operating temperature range	-30°C to +130°C	°C	DIN 51 825
Maring	KP 1 K-30		DIN 51 502

MacGregor Green Ocean lubricants are available globally.

For further information, please contact your local MacGregor account manager or send an email to:

macgregor.service@macgregor.com or lubricants.macgregor@macgregor.com



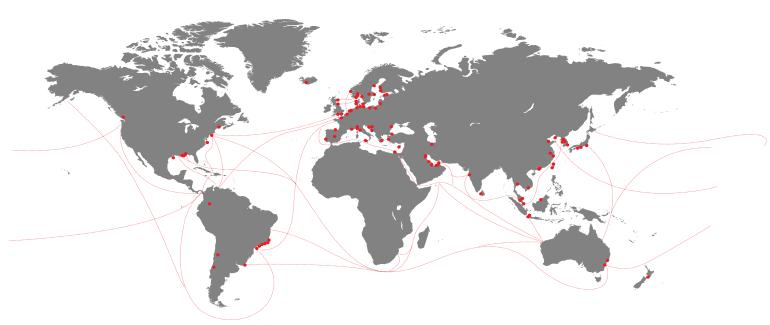


Wherever needed, you can rely on our support. We serve our brands globally:

- Ankerlökken Marine
- Allset
- ASCA
- Becker
- BMH
- Conver-OSR
- Grampian Hydraulics
- Flintstone
- Greer Marine
- Hamworthy
- Hatlapa

- Hydramarine
- Hägglunds
- Interschalt
- KGW
- KYB ASCA
- KYB Kayaba Industries / Navire Cargo Gear
- Luezhoe
- MacGregor
- MacGregor-Conver
- MacGregor-Hägglunds
- MacGregor-Kayaba

- MacGregor-Navire
- Navire Cargo Gear
- Nordströms
- Ozean Service & Reparatur
- Platform Crane Services (PCS)
- Plimsoll
- Pusnes
- Porsgrunn
- Rapp Marine
- Triplex
- Vestnorsk Hydraulikkservice (VNH)



MacGregor shapes the offshore and marine industries by offering world-leading engineering solutions and services with a strong portfolio of MacGregor, Hatlapa, Porsgrunn, Pusnes and Triplex brands. Shipbuilders, owners and operators are able to optimise the lifetime profitability, safety, reliability and environmental sustainability of their operations by working in close cooperation with MacGregor.

MacGregor solutions and services for handling marine cargoes, vessel operations, offshore loads, crude/LNG transfer and offshore mooring are all *designed to perform with the sea*.

MacGregor is part of Cargotec (Nasdaq Helsinki: CGCBV).

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