

ABOUT US LINDEMANN MARINE PRODUCTS

We are a 100% Danish owned company with more than 30 years of experience in solving lubrication related problems in areas such as automotive, wind turbine and marine industry.

Our vision is to grow and sustain a good reputation as a preferred developer of high quality specialized products.

Our goal is to become the market leader in the supply of high performance additives and lubricants in the marine sector.

PRODUCTION & STORAGE


In 2014 we have moved to a modern production facility with capacity of up to 7000 kg of stop leak additives daily. Even though we are niche manufacturer of additives, our manufacturing capacity can match high demand.

We can always offer:

- Great flexibility of production and tailor-made solutions
- High quality ingredients from well-known European suppliers
- Fast delivery and short lead time


STOP LEAK ADDITIVES

GET IN TOUCH

 lindemann-marine.com

 +45 48 14 11 11

 info@lindemann.dk

 Shipserv Tradenet #70342

WHAT IS MPS PASTE?

MPS additive range is developed, produced and distributed by Lindemann Marine Products, Denmark. MPS is designed to stop and prevent oil leakage and water ingress in sub-sea propulsion systems such as stern tubes, bow thrusters, CPPs, stabilizers and rudders.

- **Lubrication with solids**

MPS contains high concentration of PTFE and Bentonite.
- **No water/oil emulsion**

MPS does not emulsify with oil or water.
- **Compatible with most oil types**

Oil is used as a carrier for solid particles, PTFE and Bentonite.
- **Broad working temperature range**

MPS tolerates temperatures. from -30° C to 260° C.
- **MPS contains seal revitalizing additive**

Compatible with FKM and NBR elastomers. MPS restores seals elasticity without swelling.
- **Surface treatment**

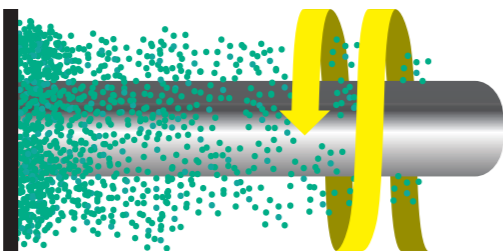
MPS polishes surface and fills in cracks of up to 2 mm. MPS provides static lubrication due to surface fluorination.
- **Anti-corrosion and EP properties**

MPS enhances corrosion protection and allows increased loads.

WORKING PRINCIPLES

Dynamic barrier in a stern tube

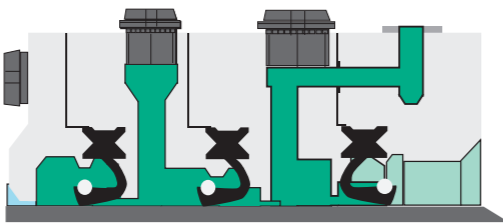
MPS 895 and 896 consist of a high concentration of PTFE and Bentonite, which will mix with the oil and travel towards the leaking place. These two elements will attach to the seal surface, filling in the cracks of up to 2mm. Due to the centrifugal forces the solids will search towards the center of the shaft. The fluorination of oil in its turn, where fluorine atoms make a “swarm” around each vacant carbon atom, will create a floating barrier.



Product choice: MPS 895 and MPS 896

Dynamic barrier in aft seal chambers

MPS 896 Special Mix has a higher concentration of PTFE and another additive, which gives the paste different structure and makes the paste cling to the rotating shaft with a firm grip. The „firm grip“ on the shaft ensures that the higher level of PTFE is interlocked right in front of any given slip between the seal and the shaft, offering a tougher sealing effect that will withstand greater forces from the sea. The paste's seal revitalizing additive preserves or restores flexibility of the rubber seals without swelling.



Product choice: MPS 896 Special Mix

CHOICE OF PRODUCTS

There are four type of MPS additives. The choice of product depends whether the system is lubricated by oil or grease, type of seal and type of leak. Treatment rate is calculated from the total oil volume of the system.

Product	Type of seal	Water ingress	Oil loss	Treatment rate
MPS 895	Face seal	✓	✓	10 %
MPS 896	Lip seal		✓	10 %
MPS 896 Special Mix	Lip seal	✓		100 %*
MPS 898	Grease lubricated systems	✓	✓	5-100 %

* MPS 896 Special Mix is applied to aft seal chambers only.

WHY CHOOSE MPS ADDITIVES?

- **Economic alternative to dry dock**

Permanent or temporary leakage stop, time to find dry dock and spare parts.
- **No need to change oil**

Compatible with mineral oil and EALs. Maximum concentration against oil loss is 10 % of total oil volume**.
- **Less wear, reduced maintenance costs and less oil consumption**

MPS prevents the system from oil loss and water contamination.
- **Vast application range:**

Stern tubes, bow thrusters, CPPs, rudders and stabilizers.
- **Easy application**

Can be performed by the crew while sailing.
- **High success rate and long lasting effect**

MPS solved leakage problems in more than 500 cases.
- **Know-how and realistic expectations**

Lindemann has experience with most systems, seals and oils, so we can give a realistic estimate on how well MPS will perform in each concrete case.
- **24/7/365 technical support**

Lindemann technical team available for guidance from the first request until dry dock.
- **On-site assistance by Lindemann service team**

Lindemann service crew can deliver and perform the procedure onboard.

** 10 % concentration is recommended for oil loss. Water ingress requires a different procedure for some lip type systems. Always consult Lindemann technical team for recommendations.

SERVICE LIFE CYCLE

Lindemann technical and service team will assist you during the whole life cycle- from the first request until dry dock.



Information gathering and leakage assessment
Vessel managers fill in the technical form with information on the system, leakage type and rate.

Finding the solution for the leakage
Lindemann technicians come with the recommendations of the product type and quantity, provide with the best quote and transit time for the requested destination.

Finding the best application method
Based on the drawings, Lindemann technical team suggests the best application method and provides detailed application instructions for the vessel manager and the crew.

Help with class approval
MPS products are backed up by both laboratory and field tests, which facilitate class approval.

Same day dispatch and Express delivery
All MPS products are always in stock and dispatched from Denmark the same day, as the order gets confirmed. **24 hours** transit time to major EU destinations. **72 hours** transit time to major destination worldwide.

Volume discounts and beneficial payment terms
Lindemann sees great value in long-term relations and offers volume discounts and advantageous payment terms for loyal customers.

Monitoring performance
Lindemann analyses the new developments in the leakage case, provides evaluation and advice.

Monitoring oil analyses
Lindemann offers evaluation of future oil analysis, since MPS changes the properties of the oil in use.

After use support
Lindemann offers advice on the best way to flush MPS remains while in dry dock and future preventive actions.