

Machine oil

MACHINE OILS MN

Machine Oils MN 11 and MN 15 are formulated upon deeply refined, dewaxed and hydrorefined mineral oils received from straight-run of crude oil. The oils are designed in two viscosity classes MN-11 and MN-15.

Characteristics:

The oils formula guarantees:

- anticorrosion protection,
- good adhesion to lubricated elements,
- proper temperature characteristics,
- proper lubrication at the presence of water.

The oils are designed:

- for lubrication of bearings exposed to water, with which greased machine oils MN create durable lubricating emulsions,
- through lubrication systems,
- auxiliary friction nodes,
- recommended for lubrication of floating stock bearings and bearings exposed to water that are subject to heavy unit duty,
- MN-11 is used to lubricate external parts of steam machines,
- MN-15 is recommended for lubrication of bearings in ship propellers.

Nº	Requirements	Research methods by	Unit	Value	
				MN-11	MN-15
1.	Kinematic viscosity at 40°C	PN-81/C-04011	mm²/s	125	165
2.	Dropping point	PN-83/C-04117	°C	-8	-5
3.	Flash point	PN-EN 22592	°C	230	250
4.	Saponification number	PN-88/C- 04288/07	mgKOH/g	17	8

The above given data are the typical values for a production batch, they are not included in technical specification, and they are subject to change due to continual product research and development.

Specifications, classifications:

ISO L-AN; DIN 51517- CL

Packaging:

180kg, 1 tonne



Storage:

The products should be stored under a roof. If they are stored in the open air where they can be exposed to atmospheric conditions – rains, they should be placed in a horizontal position in order to avoid inrush of water to a container and to prevent label damaging; they should be covered with tarpaulin.

The products should not be stored at the temperature above 60°C and in the places where solar radiation is very strong or – temperatures very low. The expiry date is 3 years if the storage conditions are satisfied.

Health, Industrial Safety and the Environment:

Information concerning safety is included in the product Safety Sheet. It contains detailed information on possible threats, warnings, first aid as well as the impact on the environment and ways of utilization of the used products.

LOTOS Oil SA and the cooperating companies do not take responsibility for misuse of the product or – the use with the violation of the precautions given. Before using the product for other than recommended purposes, seek advice in the local LOTOS Oil SA office.

The information provided in this data sheet is not intended to constitute an offer within the meaning of the Act of 23rd April 1964 - Civil Code. LOTOS Oil S.A. bears no responsibility for whatever effects of use (particularly in trade and investment decision-making) of information contained herein. Any data contained in the MSDS are typical process tolerance values and they are subject to change due to continual product research and development. Information provided in this document may undergo changes. LOTOS Oil S.A. is not responsible for the product availability.

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