

# NATERIA MWX 40



Low Ash High TBN premium mineral gas engine oil for use in modern steel piston engines operating under extreme temperatures.



## APPLICATIONS

**NATERIA MWX 40** is a next generation low ash gas engine oil, designed to :

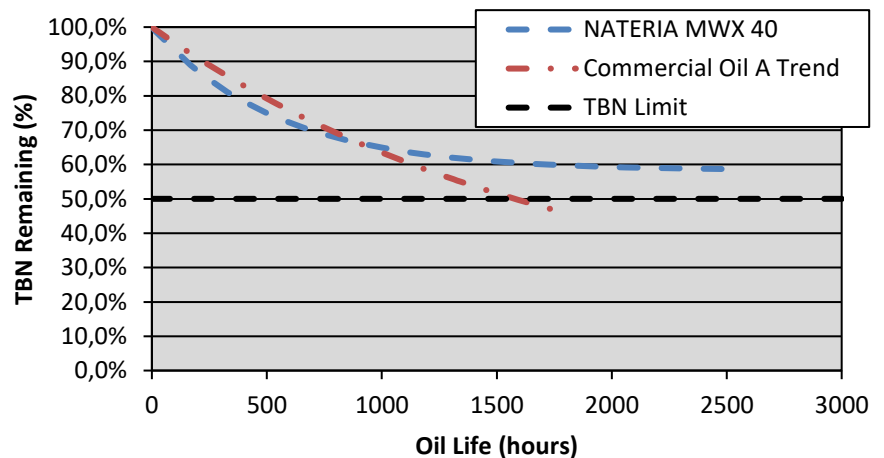
- Extend oil drain interval
- Optimize valve recession and wear control

**NATERIA MWX 40** is engineered to meet the requirements of latest generation steel piston engines operating with higher temperatures, reduced oil specific consumption and higher Brake Mean Effective Pressure.

**NATERIA MWX 40** is particularly suitable for high output engines in a 10 to 20 MW range

## LONGER OIL LIFE

**Unique technology** combining exceptional alkalinity reserve (TBN) and low ash properties. Depending on operating conditions, **NATERIA MWX 40** has proven to deliver **longer drain intervals** against older generation premium Gp. II gas engine oils.






## CUSTOMER BENEFITS

- ✓ Up to 50% longer oil drain intervals
- ✓ Outstanding Engine Protection
- ✓ Reduced downtime

## SUPERIOR ENGINE PROTECTION

**NATERIA MWX 40** excels in OEM bench testing.

PANEL COKER TEST (PCT*)	Premium Competitor 1	Premium Competitor 2	NATERIA MWX 40
<b>NATERIA MWX 40</b> demonstrates exceptional thermal stability without the formation of varnish.			
	6,5/10	7,3/10	8,63/10

\* PCT – Jenbacher method – 24h at 288°C  
Rating on oil deposit control performance.

## TECHNICAL DATA – NATERIA MWX 40

CHARACTERISTICS	METHODS	UNITS	TYPICAL VALUES
SAE Grade	-	-	40
Density at 15°C	ISO 3675	kg/m <sup>3</sup>	883.3
Kinematic viscosity at 40°C	ISO 3104	mm <sup>2</sup> /s	118.3
Kinematic viscosity at 100°C	ISO 3104	mm <sup>2</sup> /s	13.5
Viscosity index	ISO 2909	-	111
Flash point COC	ISO 2592	°C	266
Sulfated ash	ISO 3987	% wt	0.54
TBN	ASTM D 2896	mg KOH/g	7.3
TAN	ASTM D 664	mg KOH/g	1.4
Distillation loss at 250°C – Noack Test	CEC L-40-A-93	%	4
Foaming test - Seq I - Seq II - Seq III	ISO 624	mL/mL	0/0 0/0 0/0
Air Release at 150°C	ASTM D 3427	Min	22

### APPROVALS

- ✓ Jenbacher Type 2 & 3
- ✓ Jenbacher Type 4A, B, C, D
- ✓ Jenbacher Type 6C, E, F, J
- ✓ Waukesha VGF, VHP, 275GL/GL+, APG (non co-gen application)
- ✓ Wärtsilä 34 / 50 SG (tin progress)

*\*Jenbacher Series approval is for Gas Type A*

### SUPERIOR ENGINE CLEANLINESS

The piston rings and grooves showed no coke build-up nor discoloration while the cylinder head covers were clean and free of any deposits.

These outstanding cleanliness results prove the effectiveness of **NATERIA MWX 40** latest generation of additive technology

Piston



Piston Ring Grooves

Cylinder Head



### OIL MONITORING

Take out the best of your engines by implementing ANAC GAS oil monitoring program.



### SHELF LIFE

Shelf life is 3 years for unopened drums.

### STORAGE

Store the product away from humidity at temperatures not exceeding 35°C.

Total Lubrificants  
INDUSTRY & SPECIALTIES  
13-10-2020  
NATERIA MWX 40

This lubricant used as recommended and for the application for which it has been designed does not present any particular risk.  
A material safety data sheet conforming to the regulations in use in the E.C. is obtainable via your commercial adviser [sdstotalms.total.com](mailto:sdstotalms.total.com).



# TOTAL

Committed to Better Energy