

# NATERIA X 405



Gas engine oil

NATERIA X 405 is a full synthetic low ash oil for spark ignited gas engines working in very severe conditions or requiring extra long drain intervals.

## APPLICATIONS

**Spark ignited gas engines in extremely severe conditions**

- Lubrication of engines requiring a **Low Ash** oil, in power generation plants, with or without cogeneration.
- **NATERIA X 405** is particularly convenient for the engines working in extremely severe conditions, where conventional mineral oils are not suitable.

## SPECIFICATIONS

**Manufacturers**

- **NATERIA X 405** is approved:
  - WARTSILA (220 SG, 25 SG, 28 SG, 34 SG, 32 DF, 50 DF)
  - WAUKESHA (APG 220 GL).

## ADVANTAGES

**Less engine stop  
Low maintenance costs  
Better CHP plant efficiency**

- Compared to the low ash mineral based lubricants, **NATERIA X 405** significantly increases the drain intervals. Thus, it reduces the number of engine downtimes and the running cost.
- The use of **NATERIA X 405** in real situation decreases dramatically the oil consumption. Consequently there is a very low deposit amount on the heat exchangers tubes. This favors the cogeneration installation efficiency.

TYPICAL CHARACTERISTICS	METHODS	UNITS	NATERIA X 405
Density at 15 °C	ISO 3676	kg/m <sup>3</sup>	847
Kinematic viscosity at 40 °C	ISO 3104	mm <sup>2</sup> /s	94
Kinematic viscosity at 100 °C	ISO 3104	mm <sup>2</sup> /s	14
Viscosity index	ISO 2909		145
Flash point OC	ISO 2592	°C	215
Pour point	ISO 3016	°C	- 35
Sulfated ash	ISO 3987	%	0.45
BN	ASTM D 2896	mgKOH/g	5.2

Above characteristics are mean values given as an information.

TOTAL LUBRIFIANTS  
INDUSTRIE  
18-12-2014 (supersedes 19-12-2007)  
NATERIA X 405  
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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. can be obtained from your local commercial adviser or down loaded from [www.quick-fds.com](http://www.quick-fds.com).