

# PETRONAS JENTERAM SERIES

## High Performance Industrial Turbine Oil

PETRONAS Jenteram Series are high performance turbine oils specially developed for steam and light duty gas turbines, combined cycle turbines with or without associated gear drives, requiring zinc based turbine oils.

Formulated with high quality selected base oils enhanced with advanced anti-wear, anti-oxidant, anti-rust and anti-foam additives, PETRONAS Jenteram oils provide very good anti-wear protection as well as thermal and oxidation stability for up to 1,5x longer lasting performance\*.

PETRONAS Jenteram Series meets or exceeds key industrial specifications and OEM requirements.

\*vs. minimum requirements of DIN 51515 Part II for industrial turbine fluids based on TOST results (ASTM D943)

### Applications

Petronas Jenteram Series are recommended for use in:

- steam and light duty gas turbines, combined cycle turbines with or without associated gear drives
- plain and rolling element bearings, slides, journals and lightly loaded gearboxes where circulation oil is required

### Features and Benefits

Features	Benefits
Very good anti-wear protection	Protects equipment components from excessive wear and provides long equipment life
Very good thermal and oxidation stability	Maintains performance levels under wide temperatures and pressure
Very good rust & corrosion protection	Inhibits the corrosion process that occurs in presence of water, improving equipment life
Very good air release and foam stability	Maintains good efficiency in turbine systems and ensures smooth operation of the system due to rapid air release. Protects the system from air degenerative effects reducing maintenance costs
Very good water separability	Due to good water separability the system is protected from water degenerative effects, maintaining turbine efficiency at required level and reducing maintenance costs
High multi metal compatibility	Compatible with most metal alloys ensuring trouble free performance of the system
High compatibility with most seal and elastomers	Compatible with most seals and elastomers, which prevents oil leaks and contamination due to seal erosion

# PETRONAS JENTERAM SERIES

## High Performance Industrial Turbine Oil

### Typical Properties

Characteristic	Method	Specification	32	46	68	100
Specific Gravity @15°C	ASTM D 4052	(1)	0,854	0,863	0,872	0,886
Kinematic Viscosity at 40°C, cSt	ASTM D 445	±10%	32	46	68	100
Kinematic Viscosity at 100°C, cSt	ASTM D 445	(1)	5,3	6,7	8,7	11,5
Viscosity Index	ASTM D 2270	Min. 90	96	97	99	102
Flash Point, °C	ASTM D 92	**	220	230	230	240
Pour Point, °C	ASTM D 97	Max. -6	-33	-33	-30	-27
TAN, mgKOH/g	ASTM D 664	Report	0,15	0,15	0,15	0,15
FZG, Stages Passed	ISO 14635-1	Min. 8	8	8	8	8
Water Separability, 40/37/3 – mins	ASTM D 1401	(1)	10	10	20	25
Copper Strip Corrosion	ASTM D 130	Max. 2	1b	1b	1b	1b
Foam Sequence I, mL	ASTM D 892	Max. 450/0	50/0	50/0	50/0	50/0
Foam Sequence II, mL		Max. 50/0	50/0	50/0	50/0	50/0
Foam Sequence III, mL		Max. 450/0	50/0	50/0	50/0	50/0
TOST life, hrs.	ASTM D 943	Min. 3500	5250	5250	5250	5250

All technical data is provided for reference only and all specification based on DIN 51515-1 and 2

\*\*Individual limits accordingly with each viscosity grade / (1): not required in specification / SS is available upon request including quality control limits

### Performance Levels

- AGMA
- ALSTOM HTGD 90117
- DIN 51515 Part I and II
- GENERAL ELECTRIC
- R&O oil SIEMENS
- SOLAR
- US MILITARY

# PETRONAS JENTERAM SERIES

## High Performance Industrial Turbine Oil

### Health, Safety and Environment

This product is unlikely to present any significant health and safety hazards when used in the recommended application. Avoid contact with skin. Wash immediately with soap and water after skin contact. Do not discharge into drains, soil or water.

For further detail regarding storage, safe handling, and disposal of product, please refer to product SDS or contact us at: [www.pli-petronas.com](http://www.pli-petronas.com)

### Important Note

The word PETRONAS, the PETRONAS logo and such other related trademarks and/or marks used herein are trademarks or registered trademarks of PETRONAS Lubricants International Sdn. Bhd. ("PLISB"), or its subsidiaries or related Holding Corporation under license unless indicated otherwise. The PLI Documents and the information contained herein are believed to be accurate as of the date of printing. PLISB makes no express or implied representation or warranties as to its accuracy or completeness or information in or any transaction performed. The PLI Documents and information provided are based on standard tests under laboratory conditions and is given only as a guide. Users are advised to ensure that they refer to the latest version of these PLI Documents. It is the responsibility of the users to evaluate and use products safely, to assess suitability for the intended application and to comply with all applicable laws and regulations imposed by the respective local authorities.

Safety Data Sheets are available for all our products and should only be consulted for appropriate information regarding storage, safe handling and disposal of the product. No responsibility shall be taken by either PLISB or its subsidiaries and related holding corporation for any loss or injury or any direct, indirect, special, exemplary, consequential damages or any damages whatsoever, whether in action of contract, negligence or other tortuous action, in connection with or resulting from abnormal use of the materials and/or information, from any failure to adhere to recommendations, or from hazards inherent in the nature of the materials and/or information. All products, services and information supplied are under our standard conditions of sale. Please consult with any of our local representatives in the event you require any further information.