**TITAN PSW 12**

**Marine and stationary engine oil according to API CF**

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| **Description**  TITAN PSW 12 oils are high quality, alkaline dual purpose API CF level lubricating oils specially formulated to meet the requirements of medium speed marine diesel engines operating on distillate fuel.  TITAN PSW 12 oils are manufactured from the highest quality base oils and carefully selected additives, to provide the alkalinity necessary to effectively neutralize the acidic products of combustion when operating on heavy residual fuels and to give a high level of detergency to keep pistons and piston rings free of deposits. These oils have a high level of oxidation resistance to prevent premature ageing and to give long oil life. | **Application**  TITAN PSW 12 are blended with latest technology additive packages developed especially for use with engines burning distillate fuels.  **Notes**   1. In the engines types Wartsila Vasa 22 / 22/26 and Wartsila Vasa 32 / 32LN, the suitability of SAE 40 grade depends on the capacity of the lubricating oil cooler used in the installation. 2. In the engine types Wartsila Vasa 32, Wartsila 20, 26, 32, 38, 46, 64, the use of TBN 50 lubricants in heavy fuel installations is recommended, especially if fuel sulphur content is above 2.0% mass. TBN 40 lubricants can be used as well, if the experience shows the value of equilibrium TBN, to be acceptable level. |

**CHARACTERISTICS**

**TITAN PSW 12**

**Properties Unit Value Test Method**

SAE Grade 40 DIN 51 511

Density @ 15 oC g/ml 0.899 ASTM D 4052

Flash Point, COC oC 246 ASTM D 92

Pour Point oC -12 ASTM D 97

Kinematic Viscosity @ 40 oC mm2/s 160 ASTM D 445

Kinematic Viscosity @ 100 oC mm2/s 15.3 ASTM D 445

Viscosity Index - 96 ASTM D 2270

TBN mg KOH/g 12 ASTM D 2896

Sulphated Ash % wt 1.63 ASTM D 874