



SHELL ARGINA[®] OILS T

Medium-speed diesel engine oil

Product Description

Shell Argina[®] Oils T are combined cylinder and crankcase lubricants for highly-rated, medium-speed diesel engines operating on residual fuel in industrial and marine applications. The oils are formulated with premium quality, highly refined mineral base oils with an effective advanced additive system that meets the ever-increasing demands of modern medium-speed diesel engines.

Applications

- medium-speed industrial or marine propulsion and auxiliary engines burning residual fuel oils with sulphur contents in excess of 2.5%
- marine engine reduction gears and certain other ship-board applications calling for these grades

Features/Benefits

- excellent heavy fuel detergency – provides the protection needed against the harmful effects of soot and heavy fuel contaminants
- excellent thermal stability and resistance to oxidation - provides excellent high temperature protection and deposit control which contributes to long oil life
- rapid neutralization of acidic combustion products - gives long-term protection against acidic corrosion of metals
- excellent retention of Total Base Number (TBN) – provides protection in extreme conditions such as extended drain intervals

Approvals and Recommendations

Shell Argina[®] Oils T enjoy a comprehensive range of Original Equipment Manufacturers' approvals through field experience over many years and they have an excellent reputation with engine builders and operators.

- meet the requirements of API Service Classification CF and Caterpillar Series 3

Luboil Separators

- specially formulated for use with luboil separators

Detergency and TBN

Shell Argina[®] Oils T contain an advanced additive system incorporating an effective detergent that performs multifunctional roles. The detergent effectively controls the formation of deposits in the hotter parts of the engine, such as in the ring belt zone where fouling of the piston lands and ring grooves by carbonaceous deposits can lead to premature ring and liner wear, as well as increase blow by and loss of oil consumption control. The detergent also helps prevent the accumulation of lacquer and varnish deposits on critical parts.

The supply and retention of TBN in Shell Argina[®] Oils T is another prime function of the detergent system. The reserve alkalinity provides the means to neutralise acids formed during the combustion process, thus inhibiting engine corrosion and deposit formation. Retention of the TBN in the oil, even under severe oxidative and corrosive conditions that exist in modern engines, is particularly effective and contributes towards reliability and extending engine life.

During the engine operating cycle, a wide variety of contaminants enter the crankcase, which include water, solid combustion products and residues from oxidative and thermal degradation of both the fuel and, to a lesser extent, the lubricating oil. The detergent system possesses dispersancy characteristics that reduces the risk of these contaminants forming cold and hot sludges in the crankcase and under valve covers.

Shell Argina® Oils T do not, contain ashless dispersant additives, therefore contaminants can be removed in the separator equipment commonly fitted to medium-speed diesel engines.

Oil Change Criteria

Due to the large volume of oil used in the lubricating systems of industrial and marine medium-speed diesel engines, change intervals are optimized by using continuous centrifugal cleaning equipment to remove insolubles and any accidental water contamination which help extend the life of the oil.

Provided the centrifugal cleaning equipment is operated efficiently, the most important factors controlling oil performance is the level of TBN. The TBN will be affected by the following conditions:

- (i) the fuel sulfur content
- (ii) oil consumption rate
- (iii) engine sump temperature

As a general guide, the TBN should be, numerically, not less than five times the percentage sulphur level of the fuel being used. However, the engine manufacturer's recommendations should be consulted for detailed guidance.

Shell offers engine condition monitoring services for both industrial and marine users of Shell Argina® Oils T. These services provide the essential regular check on the condition of your power units, enabling you to take remedial action, to help avoid costly downtime and operate more efficiently. Samples should be taken at regular intervals of approximately 750 hours.

Typical Properties of Shell Argina® Oils T			
	Test Method	SAE Grade	
		30	40
Product Code		63474	63475
Property			
Gravity, °API	D 1298	25.0	24.4
Viscosity:			
@ 40°C, cSt	D 445	104	139
@ 100°C, cSt	D445	11.8	14.9
Viscosity Index	D 2270	102	102
Flash Point, °C (°F)	D 92	210 (410)	225 (435)
Pour Point, °C (°F)	D 97	-18(0)	-18(0)
TBN-E mg KOH/g	D 2896	30	30
Sulphated Ash	D 874	3.7	3.7
Load Carrying Capacity FZG Gear Machine Pass Stage	D 5182	11	11

Handling & Safety Information

For information on the safe handling and use of this product, refer to its Material Safety Data Sheet at <http://www.shell-lubricants.com/msds/>. If you are a Shell Distributor, please call **1+800-468-6457** for all of your service needs. All other customers, please call **1+800-840-5737** for all of your service needs. Information is also available on the World Wide Web: <http://www.shell-lubricants.com/>.