



## Mobil DTE Oil Double Letter Series

### Circulating Oils

#### Product Description

The Mobil DTE Oil Double Letter Series of lubricants are high performance heavy duty circulating oils primarily intended for continuous reuse in circulation lubrication systems for gears and bearings. They are formulated from high quality base stocks and a proprietary additive system to provide superior protection against rust, excellent resistance to oxidation and thermal degradation, and a high level of protection against wear, plus excellent resistance to high temperature corrosion of soft metals. They possess good demulsibility that permits water and other contaminants to separate readily from the oil in the system reservoir. The Mobil DTE Oil Double Letter Series are available in four ISO viscosity grades from 150 to 460.

The Mobil DTE Double Letter Series family of products provides a versatile lubricant source for a wide range of industrial equipment. They provide the users with very reliable and efficient operation in industrial circulating system applications, as well as other lubricant application methods, including hydraulic systems. They are particularly resistant to the effects of prolonged high temperature exposure and perform very well in circulating systems with short oil residence times. Mobil DTE Double Letter Series oils have very good water separability properties, which allows water to separate readily in the system reservoir. Their high level of anti-wear properties results in exceptional equipment performance that not only results in fewer breakdowns but helps improve production capacity.

This combination of benefits has Mobil DTE Oil Double Letter Series the product of choice for many users around the world, for the last several decades.

#### Features and Benefits

The Mobil DTE family of products is well known and highly regarded world-wide based on their outstanding performance and the RandD expertise and the global technical support which stand behind the brand. The highly versatile performance of one series of oils in this family, Mobil DTE Oil Double Letter Series oils, has made them the choice of many users around the world for many decades.

Mobil DTE Named oils enjoy an excellent reputation in the lubrication of the circulation systems of industrial gearboxes, plus a wide variety of ancillary equipment, including hydraulic systems. As designs change and increase in severity, it is the challenge of our scientists to understand the effect of these changes on the lubricant and to formulate these products for the broad versatility they are recognized for.

For the Mobil DTE Oil Double Letter Series of lubricants this process has resulted in the use of a proprietary high quality base stocks for outstanding oxidation stability, plus a unique additive combination to ensure the excellent, wide-ranging performance of these oils. A review of the features, advantages and potential benefits of the product are shown below:

Features	Advantages and Potential Benefits
Excellent thermal/oxidative and chemical degradation resistance	Long lubricant charge life giving extended drain periods and reduced product replacement costs; reduced filter deposits and longer filter life
Outstanding anti-wear performance	Reduced pump wear leading to longer pump life, protection of critical bearings and gearing
Protection against rust and corrosion in both the liquid and vapour phase	Enhanced system cleanliness for reduced maintenance and unplanned stoppages
Good demulsibility and avoids emulsion formation	Improved operating efficiency and lower operating costs
Multiple application capability	Reduced plant inventory savings

#### Applications

These oils are intended primarily for the lubrication of plain bearings, roller bearings, parallel shaft and bevel gearing. They are suitable as multipurpose lubricants in systems not subject to shock loading and which do not require extreme pressure performance. They are used in applications using splash, bath and ring oil arrangements and all other application methods involving pumps, valves and auxiliary equipment. They are recommended for use in hydraulic systems where higher viscosity oils are specified.

- Moderate duty spur, bevel, helical and herringbone gear units
- Circulating systems
- Mobil DTE Oil Extra Heavy and BB can also be used in hydraulic systems employing gear, vane, radial and axial piston pumps where anti-wear hydraulic fluids are required and clearances are relatively large
- Certain compressors and vacuum pumps handling air, natural gas and inert gases provided the discharge temperatures do not exceed 150°C

## Typical Properties

<b>MOBIL DTE Oil Double Letter Series</b>	<b>Mobil DTE Oil Extra Heavy</b>	<b>Mobil DTE Oil BB</b>	<b>Mobil DTE Oil AA</b>	<b>Mobil DTE Oil HH</b>
ISO Viscosity Grade	150	220	320	460
Viscosity, ASTM D 445				
cSt @ 40°C	146	218	325	436
cSt @ 100°C	14.4	18.8	24.4	29.4
Viscosity Index, ASTM D 2270	96	96	96	95
Pour Point, °C, ASTM D 97	-21	-18	-12	-15
Flash Point, °C, ASTM D 92	272	284	286	288
Density @15°C, ASTM D 1298, kg/l	0.89	0.89	0.90	0.90
Demulsibility for non-EP oils, ASTM D2711, ml free water	38	36	39	35
Water separability, ASTM D 1401, Min. to 40/37/3 ml emulsion @ 82°C	20	20	20	20
Rust Prevention, ASTM D 665				
Distilled Water	Pass	Pass	Pass	Pass
Sea Water	Pass	Pass	Pass	Pass
Copper Corrosion, ASTM D 130 hours @ 100°C	1A	1A	1A	1A
FZG Gear Test, DIN 51354, Failure Stage	12	12	12	12

## Health and Safety

Based on available information, this product is not expected to produce adverse effects on health when used for the intended application and the recommendations provided in the Material Safety Data Sheet (MSDS) are followed. MSDS's are available upon request through your sales contract office, or via the Internet. This product should not be used for purposes other than its intended use. If disposing of used product, take care to protect the environment.

Toxicity class: free BAG T No.: 611500

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2-2016

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Typical Properties are typical of those obtained with normal production tolerance and do not constitute a specification. Variations that do not affect product performance are to be expected during normal manufacture and at different blending locations. The information contained herein is subject to change without notice. All products may not be available locally. For more information, contact your local ExxonMobil contact or visit [www.exxonmobil.com](http://www.exxonmobil.com)

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