

# Mobil DTE Double Letter Series

## Circulating Oils

### Product Description

The Mobil DTE 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 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. 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.

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

### Features & Benefits

The Mobil DTE family of products is well known and highly regarded world-wide based on their outstanding performance and the R&D 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 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 and paper machines, plus a wide variety of ancillary equipment. 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 recognised for.

For the Mobil DTE 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
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
- The Mobil DTE Extra Heavy through HH oils are well suited for circulating systems
- The oils perform well at the elevated temperatures normally found in the dryer sections of paper machines
- Mobil DTE Extra Heavy and BB can also be used in hydraulic systems where clearances are relatively large and temperatures and pressures are moderate
- Certain compressors and vacuum pumps handling air and inert gases provided the discharge temperatures do not exceed 150°C

## Specifications & Approvals

MOBIL DTE Double Letter Series meets or exceeds the following industry and builder specifications	Mobil DTE Oil Extra Heavy	Mobil DTE BB	Mobil DTE AA	Mobil DTE HH
Meets or Exceeds FAG: PM Oils for Dry Section (OHT-F-3)		X		
Meets or Exceeds SKF: PM Oils for Dry Section		X		

## Typical Properties

MOBIL DTE Double Letter Series	Mobil DTE Oil Extra Heavy	Mobil DTE BB	Mobil DTE AA	Mobil DTE HH
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

ExxonMobil Lubricants & Specialties

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<b>MOBIL DTE Double Letter Series</b>	<b>Mobil DTE Oil Extra Heavy</b>	<b>Mobil DTE BB</b>	<b>Mobil DTE AA</b>	<b>Mobil DTE HH</b>
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	10	15	5	5
Rust Prevention, ASTM D 665,				
Distilled Water	Pass	Pass	Pass	Pass
Sea Water	Pass	Pass	Pass	Pass
Copper Corrosion, ASTM D130 3 hours @ 100° C	1A	1A	1A	1A
FZG Gear Test, DIN 51354, Failure Stage	12	12	12	12

## Health & 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.

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