

# MOBIL DTE EXCEL SERIES

Hydraulic Oil

## Product Description

Mobil DTE Excel Series are supreme performance hydraulic oils developed for use in high-speed, high-pressure piston, vane and gear pumps. They are formulated from high quality base stocks and specially selected super-stabilised additives. Their advanced technology ashless anti-wear additive system was developed to give exceptional corrosion protection for copper-based alloys in severe hydraulic applications such as high-pressure axial piston pumps. This unique additive system also gives the Mobil DTE Excel Series excellent compatibility with coolants used in metal working applications.

The Mobil DTE Excel oils exhibit excellent oxidation and thermal stability properties which results in extended oil and filter life while providing optimum equipment protection reducing both maintenance and product disposal costs. They were developed in conjunction with the major OEM's to meet the stringent requirements of severe hydraulic systems using high pressure, high output pumps as well as handling the critical requirements of other hydraulic system components such as close clearance servo-valves and the high accuracy numerically controlled (NC) machine tools. They are designed to work with systems operating under moderate to severe conditions where high levels of anti-wear and film strength protection are needed, yet they are formulated to also work where non-anti-wear hydraulic oils are generally recommended.

## Features & Benefits

The Mobil DTE Excel Series hydraulic oil exhibit outstanding high temperature performance providing an extra margin of equipment protection. Its excellent oxidation resistance and thermal stability characteristics allow extension of oil and filter change intervals while assuring exceptionally clean systems and trouble-free operation. These high level of anti-wear properties and excellent film strength characteristics results in exceptional equipment performance that not only results in fewer breakdowns but helps improve production capacity. Their controlled demulsibility permits the oils to work well in systems contaminated with small amounts of water yet readily separate large amounts of water .

Due to continual product research and development, the information contained herein is subject to changes without notification. Additional important health and safety information on this product can be found in the Material Safety Data Sheet, which is available online at [www.imperialoil.ca/mobil](http://www.imperialoil.ca/mobil) or by contacting Lubricants and Petroleum Specialities, Technical Services, Technical Help Desk: 1-800-268-3183



<b>Features</b>	<b>Advantages and Potential Benefits</b>
<b>Unique Ashless Anti-wear Additives</b>	Reduced wear Improved coolant compatibility Protects systems using various metallurgy
<b>Outstanding Thermal and Oxidation Stability</b>	Provides long oil and equipment life Reduced deposits and sludge formation Extends filter life
<b>Excellent Corrosion Protection</b>	Prevents internal hydraulic system corrosion Reduces negative effects of moisture in systems Provides corrosion protection of multi-metallurgy component designs
<b>Very Good Multi-metal Compatibility</b>	Assures excellent performance of various components Reduces requirements for additional products
<b>Meets a Wide Range of Equipment Requirements</b>	One product can replace several Minimises inventory requirements Reduced potential for product misapplication
<b>Controlled Demulsibility</b>	Protects systems where small quantities of moisture are present Readily separates larger quantities of water
<b>Very Good Coolant Separability</b>	Improved coolant batch life Reduced maintenance costs

### Applications

- Hydraulic systems critical to deposit build-up such as sophisticated Numerically Controlled (NC) machines, particularly where close clearance servo-valves are used
- Systems employing multi-metal designs in pumps and other system components
- Applications where cross-contamination of hydraulic fluids and coolants can occur
- High pressure vane, piston and gear pumps
- Systems where very high operating temperatures are typical
- Where small amounts of water are unavoidable
- In systems containing gears and bearings
- Systems requiring a high degree of load-carrying capability and anti-wear protection
- Applications where thin oil-film corrosion protection is an asset such as in systems containing moisture

### Specifications & Approvals

<b>Mobil DTE Excel Series has the following builder approvals:</b>	<b>32</b>	<b>46</b>	<b>68</b>
Cincinnati Machine P-68 P-69 P-70	X	X	X
Denison HF-0	X	X	X
Vickers I-286-S	X	X	X
Vickers M-2950-S	X	X	X

Due to continual product research and development, the information contained herein is subject to changes without notification. Additional important health and safety information on this product can be found in the Material Safety Data Sheet, which is available online at [www.imperialoil.ca/mobil](http://www.imperialoil.ca/mobil) or by contacting Lubricants and Petroleum Specialties, Technical Services, Technical Help Desk: 1-800-268-3183

© 2001 Imperial Oil

® The Mobil logotype and the Pegasus design are registered trademarks of Exxon Mobil Corporation.

™ Trademark of Exxon Mobil Corporation, Imperial Oil, Licensee.

## Typical Properties

<b>Mobil DTE Excel Series</b>	<b>32</b>	<b>46</b>	<b>68</b>
<b>ISO Viscosity Grade</b>	32	46	68
<b>Viscosity, ASTM D 445</b>			
cSt @ 40°C	32.0	46.0	68.0
cSt @ 100°C	5.4	6.7	8.6
<b>Viscosity Index, ASTM D 2270</b>	97	97	97
<b>Density 15°C, ASTM D 4052, kg/L</b>	0.8725	0.8765	0.8825
<b>Copper Strip Corrosion, ASTM D 130, 3 hrs @ 100°C</b>	1A	1A	1A
<b>Rust Characteristics, ASTM D 665A</b>	Pass	Pass	Pass
<b>FZG Gear Test, DIN 51534, Fail Stage</b>	12	12	12
<b>Pour Point, °C, ASTM D 97</b>	-33	-33	-33
<b>Flash Point, °C, ASTM D 92</b>	222	226	236
<b>Foam Sequence I, II, III, ASTM D 892 , ml</b>	20/0	20/0	20/0

## Precautions

MOBIL DTE EXCEL is manufactured from high quality petroleum base stocks, carefully blended with selected additives. As with all petroleum products, good personal hygiene and careful handling should always be practiced. Avoid prolonged contact to skin, splashing into the eyes, ingestion or vapour inhalation. Please refer to our Imperial Oil Material Safety Data Sheet for further information.

Note: This product is not controlled under Canadian WHMIS legislation.

Due to continual product research and development, the information contained herein is subject to changes without notification. Additional important health and safety information on this product can be found in the Material Safety Data Sheet, which is available online at [www.imperialoil.ca/mobil](http://www.imperialoil.ca/mobil) or by contacting Lubricants and Petroleum Specialities, Technical Services, Technical Help Desk: 1-800-268-3183

© 2001 Imperial Oil

® The Mobil logotype and the Pegasus design are registered trademarks of Exxon Mobil Corporation.

™ Trademark of Exxon Mobil Corporation, Imperial Oil, Licensee.