



# Lubricants Report



## Technical Information from Shell Lubricants

TIP# 1.20.06

### DONAX\* TD & TDL UNIVERSAL TRACTOR HYDRAULIC FLUIDS

#### PRODUCT LINE

**Donax TD** is designed to provide excellent lubrication in a wide variety of farm, construction and forestry equipment where a common reservoir provides oil to the transmission, hydraulic system and final drives. **Donax TDL** is designed for winter use in similar applications.

**Donax TD** is fully approved for John Deere J20C and Ford M2C134D specifications. **Donax TDL** is formulated for low temperature universal tractor hydraulic fluids. Both products are also recommended for a wide variety of older tractors as listed on the next page. Our recommendations are further backed by field tests in over 200 tractors and combines with no fluid related failures. The enhanced additive chemistry used in **Donax TD** and **Donax TDL** is used in factory fill and service fill tractor fluids by several leading equipment manufacturers.

#### PERFORMANCE BENEFITS

- **Bearing Life and Shift Wear:** Improved EP/anti-wear characteristics extend bearing and shift mechanism life.
- **Quieter Longer Lasting Wet Brakes:** Superior frictional characteristics and anti-chatter performance provide more brake capacity in addition to extended life and reduced brake noise.
- **Quieter Longer Lasting Brakes:** Anti-chatter performance reduces brake noise and helps to extend brake life.
- **Improved Steering, Braking and Hydraulic System Response:** Low temperature fluidity properties improve fluid pumpability and the response action of hydraulically operated components.
- **Extended Pump and Transmission Life:** Excellent filterability and anti-wear properties contribute to easy cold weather startup and improved protection of critical hydraulic and transmission components.
- **Anti-Corrosion:** Excellent corrosion control reduces brake system corrosion and improves seal life as well as copper compatibility.
- **Dependability:** Advanced additive technology and field proven performance provide superior performance confidence in today's complex and expensive farm, forestry, and construction equipment.

**Donax TD** meets several hydraulic specifications including Vickers 1-286-S and M-2590-S, Sundstrand, Plessey-Sundstrand, Cincinatti Milacron, Denison HF-1 and HF-2, and API GL-4.

**Donax TD** is fully approved for John Deere J20C, Ford M2C134D, and Cat. TO-2.

#### OLDER APPLICATION SPECIFICATION GUIDE

**Donax TD** and **Donax TDL** (for winter only)) have provided excellent performance in field tests in all of these applications and Shell's guarantee covers **Donax TD** and **Donax TDL** (for winter only) as replacements for all OEM branded products listed in this guide.

Original Equipment Manufacturer (OEM)	Fluid Specification	OEM's Brand Name
Belarus	Tractor Hydraulic Fluid	-
J. I. Case (including International Harvester and Steiger)	JIC-145/MS-1210 JIC-185/MS-1204 JIC-185/MS-1205 MS-1206 MS-1207 (current) JIC 143/144 B6 (International Harvester) SEMS 17001 (Steiger)	- - - Powerguard PTF Fluid Hytran Plus Hytran Plus
Caterpillar	TO-2 (obsolete)	-
John Deere	J20C, J20D (J20A, J20B) J14B,C J21A	Hygard - -
Deutz-Allis, Allis-Chalmers (Agco)	Part No. 9003088, 9003089, 9003090, 9003091	Power Fluid 821/821XL
New Holland, Ford New Holland (Fiat), Versatile	ESN-M2C41-B ESN-M2C48-B, M2C48-C/C2/C3 ESN-M2C53-A ESN-M2C86-B ESN-M2C134-A,B,C ESN-M2C134D (current) Versatile	Ford Hydraulic Oil 41 - - Ford Hydraulic Oil 41 - Hygear Fluid 23M, 24M Type 303 Fluid
Hesston, Hesston - Fiat	AF-87 (current)	Olio Fiat Tutela Multi-F
Kubota	-	UDT (current)
Massey - Ferguson, Minneapolis Moline, New Idea, Oliver (Agco)	M1110 M1127A,B M1129-A M1135 M1141 Q-1705,Q-1766,Q-1722, Q-1802 Q-1826 (current)	- - - Permatran III - - UHTF Type 55

## TYPICAL PROPERTIES

	DONAX TD	DONAX TDL	
PRODUCT CODE	436-104	436-103	ASTM TEST METHOD
Density at 15°, kg/m <sup>3</sup>	881	884	D 1298
Pour Point, °C	-39	-45	D 97
Flash Point, °C	228	190	D 92
Viscosity Kinematic			
- cSt (mm <sup>2</sup> /s) at 40°C	52.4	34.2	D 2983
- cSt (mm <sup>2</sup> /s) at 100°C	9.1	7.1	D 2983
Brookfield			
- cP(mPa.s) at -20°C	4,320	1,230	D 2983
- cP(mPa.s) at -25°C	8,510	2,470	D 2983
- cP(mPa.s) at -30°C	18,730	4,400	D 2983
- cP(mPa.s) at -35°C	59,600	9,710	D 2983
- cP(mPa.s) at -40°C	170,000	21,000	D 2983
Viscosity Index	150	189	D 2270

[Visit](#) your nearest Shell Associate or Reseller for more details.

Need more product information? Please the [Shell Helps Centre Technical Desk](#) at 1-800-661-1600 or e-mail us at [questions@shell.ca](mailto:questions@shell.ca)

MSDS requests? Please call 1(403)691-2615 or fax your request to 1(403)691-3321.

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