

# **Lubricants Report**



## **Product Data Sheet from Shell Lubricants**

PDS# 1.32.01

# DONAX TC\* Multiseason PREMIUM MULTIGRADE TRANSMISSION FLUID FOR CATERPILLAR TRANSMISSIONS

#### **PRODUCT LINE**

**Donax TC Multiseason** is specifically designed for modern Caterpillar transmissions. It provides excellent compatibility with transmission components and premium frictional characteristics to maximize equipment performance. It utilizes the same performance additive package used in Shell**Donax TC** single grades, all of which are fully approved for Caterpillar TO-4 transmission fluid specifications.

#### **APPLICATIONS**

**Donax TC Multiseason** is specifically designed for Caterpillar transmissions that require Caterpillar TO-4 fluids but also require better low temperature flow.

**Donax TC Multiseason** meets Allison C-3/C-4 fluid requirements as well as Caterpillar TO-2 specifications for powershift transmissions. Caterpillar's TO-4 transmission fluid specifications do not include the opportunity for formal approval of multigrade oils, however Caterpillar does have recommendations for the use of multigrades provided they use the same performance additive package as approved single grades.

**Donax TC Multiseason** does utilize the same additive performance package as TO-4/TO-4M approved fluids, and is acceptable for use in Caterpillar equipment specifying TDTO-TMS fluids.

#### **PERFORMANCE BENEFITS**

- Improved Transmission Life A key factor limiting transmission life in modern equipment is the compatibility of new friction materials such as F-37 and Rayflex with engine oils. Active nitrogen containing components commonly found in many engine oils, can cause these friction materials to become brittle and break up resulting in reduced transmission life.
- **Donax TC Multiseason** is formulated without aggressive nitrogen containing components to ensure maximum life of clutch frictional materials.
- In addition **Donax TC Multiseason** is formulated to provide superior anti-wear protection, anti-foaming characteristics and oxidation stability resulting in longer equipment life.

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### **TYPICAL PROPERTIES**

PRODUCT CODE	436-116	ASTM METHOD
Viscosity		
- cSt @ 40°C	55.5	D 445
- cSt @ 100°C	10.9	D 445
Viscosity Index	195	D 2270
Brookfield Viscosity		
- cP @ -40	13710	D 2983
Pour Point °C	-51	D 97
Zinc Content % mass	0.12	AA/ICP
Calcium Content % mass	0.31	AA/ICP
MRV @ -40 °C	24150	D 4684

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

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