



HY-GARD

TECHNICAL DATA SHEET

Premium Universal Tractor Transmission Oil (UTTO) for tractors and other utility machinery for agricultural, turf and forestry applications exceeding JDM J20 requirements

APPLICATION

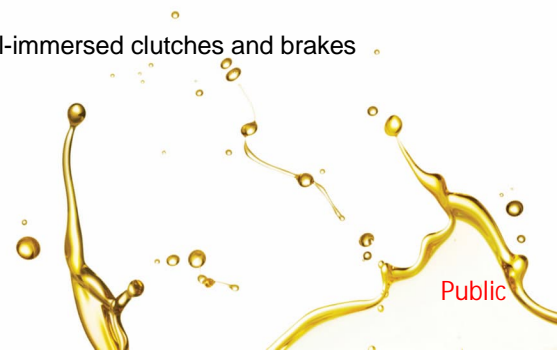
JOHN DEERE HY-GARD is a "universal tractor transmission oil" (UTTO) to be used in transmissions, hydraulic systems and oil-immersed brakes. It's recommended for equipment with either common system reservoirs or separate transmission and hydraulic systems.

It is particularly suitable for lubricating:

- Gearboxes and differentials with oil-immersed brakes
- Hydraulically controlled gearboxes
- Gearboxes with branched hydraulic systems
- Hydraulic powered systems & drives

PERFORMANCE FEATURES & BENEFITS

- Approved by major OEMs.
- High viscosity index to ensure easy start-up under cold conditions and good oil film resistance at high temperature
- Wear protection: superior anti-wear and extreme-pressure properties to protect gears and pumps in hydraulic systems
- Long life: excellent thermal stability and oxidation resistance
- Corrosion protection
- Anti-chatter: special frictional properties help prevent noise and chatter in oil-immersed clutches and brakes
- Superior foaming resistance





PERFORMANCE FEATURES & BENEFITS

HY-GARD is recommended when the following specifications are required:

- Exceeds John Deere JDM J20C* and RES 10060 tests.
- API GL-4
- AFNOR NF E 48 602 Type HV
- Ford New Holland M2C-134D, FNHA-2-D.201.00
- Massey-Ferguson M1143 (10W-30 grade only), M1135 (meets) (5W-30 grade only)
- Volvo WB 101
- ZF TE-ML 03E, 05F
- Caterpillar TO-2
- Low viscosity HY-GARD meets John Deere JDM J20D

Approvals:

Exceeds JOHN DEERE JDM J20C

HY-GARD can be used in all applications, where JDM J20C is required.





HEALTH & SAFETY

HY-GARD is unlikely to present any significant health or safety hazard when properly used in the recommended application, and good standards of industrial and personal hygiene are maintained.

For further guidance on Product Health & Safety, refer to the appropriate John Deere Product Safety Data Sheet: www.jdmsds.com.

RECOMMENDATIONS & OBSERVATIONS

HY-GARD is particularly suitable for outside temperature ranging between -25°C and +50°C.

Low-Viscosity HY-GARD is suitable for outside temperature ranging between -40°C and +20°C.

TYPICAL PHYSICAL CHARACTERISTICS				
CHARACTERISTICS		METHOD	TYPICAL VALUE HY-GARD	TYPICAL VALUE HY-GARD Low Viscosity
Density at 15°C	kg/m ³	ASTM D 4052	873	
Viscosity at 40°C	mm ² /s	ISO 3104	59.2	37.8
Viscosity at 100C	mm ² /s	ISO 3104	9.4	7.5
Viscosity Index		ISO 2909	141	172
Pour Point	°C	ISO 3016	-40	-51
Flash Point	°C	ISO 2592	220	152
Brookfield Viscosity at -20°C	Pa.s	ASTM D2983	4.3	1.45
at -35°C	Pa.s		62.4	
at -40°C	Pa.s			17.0

These characteristics are typical of current production. Whilst future production will conform to manufacturer specification, variations in these characteristics may occur.

Last updated: 22.02.2024

