

# Hy-Gard™ Hydraulic and Transmission Oil

Formulated to protect heavily-loaded gears, wet brakes, wet clutches and hydraulic systems



Your machine depends on hydraulic oil to do so much – prevent wear, provide friction, handle extreme pressures, stop deposits. There’s no room for error. If your oil can’t protect your whole system just right, you may find yourself with a down machine.

That’s why you need John Deere Hy-Gard transmission and hydraulic oil. It’s developed, tested and monitored by John Deere engineers who make sure it’s the best possible choice for your John Deere. And it’s proven itself time and time again in the most heavy-duty agricultural equipment.

Don’t risk it with lesser oils. Make sure you have the best. Make sure you have Hy-Gard.



## Benefits of Hy-Gard Hydraulic and Transmission Oil:

### Performance tested

In the lab and in the field, Hy-Gard is preferred by John Deere engineers to deliver increased performance and protection of transmission and hydraulic systems.

### Increases efficiency and decreases wear

Hy-Gard retains proper viscosity over a wide range of operating temperatures thanks to its polymeric viscosity improver. The proper viscosity allows it to work effectively, flowing readily through any part of the system.

Oil that’s too light can cause increased wear and generate heat. Oil that’s too heavy will cause sluggish operation and lower mechanical efficiency and fuel economy. Hy-Gard is just right.

### High tolerance

Hy-Gard can handle water contamination without sludge forming. This prevents clogged filters and hydraulic system malfunction.

### Reduces wet-brake chatter

Hy-Gard is formulated to maximize brake capacity with minimal brake chatter and wear. Better brake chatter control ensures smooth stopping, reduced damage from vibration, less noise and a longer brake life.

### Superior wet-clutch performance

You can expect 15 percent better clutch performance with Hy-Gard than with competitive oils. That’s because Hy-Gard’s friction modifiers allow limited clutch slippage for smooth engagement, reducing clutch wear and promoting a longer life.

### Superior High Temperature Performance

The antioxidation capability allows Hy-Gard to work properly at high temperatures, helping keep transmissions and hydraulic system parts cool and clean.

### Superior protection

Hy-Gard is proven to prevent rust and corrosion, especially during low-use periods.

### Contains superior anti-wear additives

Anti-wear additives keep gear and bearing wear to a minimum. The anti-wear formulation of Hy-Gard develops a durable fluid film, which helps prevent metal-to-metal contact.

# John Deere first developed Hy-Gard™ oil for its own equipment in 1973, and it quickly became the industry standard.

Since then it has been tested, improved and upgraded several times for better performance. What does this mean for you? Below are the answers to questions you may have about Hy-Gard and your operation.

## How does Hy-Gard protect my John Deere machine?

Transmission and hydraulic oils must perform many different tasks at the same time. Hy-Gard is proven to:

- Prevent wear on high torque heavy-loaded gears and bearings
- Stop wear and corrosion in hydraulic pumps
- Protect against final drive wear due to anti-wear additives for gears
- Provide proper friction for wet brakes and clutches, reducing slippage, wear and chatter and promoting high braking capacity
- Improve wet clutch performance
- Keep your system free of sludge and clogs
- Prevent metal-to-metal contact
- Protect against rust and corrosion – in the field and in storage

## How does Hy-Gard compare to other hydraulic oils?

- Hy-Gard is an unique oil developed by John Deere engineers to meet the exact needs of John Deere machines. It undergoes rigorous testing to meet the high performance standards set by John Deere.
- Because there is no industry classification for hydraulic/transmission oil, each manufacturer establishes a minimum requirement that oil should meet for use in their equipment.
- John Deere has established a JDM J20 specification for minimum tractor performance hydraulic fluid. Hy-Gard not only meets the requirements for JDM J20 but exceeds it. Competitive oils may not meet even the minimum performance requirements for John Deere machines.

## Can Hy-Gard be used in non-John Deere equipment?

- Hy-Gard is designed for use in John Deere equipment; however it can also be used in many competitive transmission and hydraulic systems. Hy-Gard is suitable for:
  - Transmissions and differential units with immersed wet brakes
  - Gearboxes with hydraulic brakes
  - Gearboxes with hydraulic drive systems

## Hy-Gard – U.S.

Size	Part Number
1 gal.	TY6354
2.5 gal.	TY22062
5 gal.	AR69444
30 gal.	TY6238
55 gal.	AR69445
275 gal. bulk	TY26992

## Hy-Gard – Canada

Size	Part Number
10 L	TY6349
20 L	TY6283
125 L	TY22090
205 L	TY6267
1100 L Lubetainer	TY24324

## Physical Properties

Test Parameters	Hy-Gard	Low-Viscosity Hy-Gard
Viscosity 40°C	59 cSt	33 cSt
Viscosity 100°C	9.4 cSt	7.1 cSt
Viscosity Index	140	195
Pour Point	-40°C	-51°C
Flash Point	227°C	180°C

## Service Ratings

### Hy-Gard may be used when the following oils are specified

AGCO Massey Ferguson	M1135, M-1141, M-1139
AGCO White Farm	Q-1722, Q-1766, Q-1766B Q-1802, Q-1826
Allis-Chalmers, Deutz- Allis, AGCO Allis	821XL
Case	MS-1207, MS-1210
Caterpillar	TO-2
Clark	MS-68
Deutz	Hyd. Trans. Fluid
Dresser	Transmission Hyd. Fluid (HMS B806-0002)
Eaton Hyd	Hyd. Trans. (Form3-0401-123)
Ford/New Holland	ESN-M2C41B, M2C134D, M2C48B, M2C48C
IHC	B-6
ISO	46-68
Kubota	UDT Hyd. Trans. Fluid
Oliver	Type 55
Sunstrand	Hydrostatic transmission
Zetor	OT-H, GL-4

# Ask us about how Hy-Gard can improve your operation today!