

# Hy-Gard™ Hydraulic and Transmission Oil

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



Protect your hydraulic and power train systems with reliable John Deere Hy-Gard™. Hy-Gard™ hydraulic and transmission oil is designed not only to meet John Deere equipment standards- it's designed to exceed them. This multi-viscosity formula allows your system to perform strongly all year round.

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

### Performance tested

Both in the lab and in the field, and approved by John Deere engineers to meet the increased demands for performance and protection of transmissions and hydraulic systems.

### Increases efficiency and decreases wear

A polymeric viscosity improver helps Hy-Gard™ to retain its proper viscosity over a wide range of operating temperatures. Hy-Gard™ works effectively because the proper viscosity allows it to flow readily through any part of the system. Oil that is too light can cause increased wear, weep past seals, and generate heat. Oil that is too heavy will cause sluggish operation and lower mechanical efficiency and fuel economy.

### High tolerance

To water contamination without sludge formation, which could cause filter clogging and hydraulic system malfunction.

### Reduces wet-brake chatter

Hy-Gard™ oil is formulated to maximise brake capacity with minimum brake chatter and wear. Better brake-chatter control provides smooth stopping, reduced damaged from vibration, less noise, and longer brake life.

### Superior wet-clutch performance

Hy-Gard's friction modifiers allow limited clutch slippage for smooth engagement, which reduces clutch wear and provides long life.

### Superior High Temperature Performance

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

### Superior protection

Provides protection against rust and corrosion, particularly 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 to improve 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™ oils are formulated to provide the following protection:

- Prevents wear on high torque heavy-loaded gears and bearings
- Prevents wear and corrosion in hydraulic pumps
- Prevents final drive wear due to anti-wear additives for gears
- Provides proper friction for wet brakes and clutches, reducing slippage, wear and chatter.

## 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 and undergoes rigorous testing to meet the high performance standards set by John Deere for their oils.
- Because there is no industry classification for hydraulic/transmission oils each manufacturer establishes a minimum requirement that oils 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. It is possible that competitive oils do not meet even the minimum performance requirements for John Deere machines.

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

Hy-Gard™ was designed for use in John Deere equipment; however it can also be used in many non-John Deere 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.

## What viscosity grade is Hy-Gard™?

Hy-Gard™ is a multi-viscosity fluid with a high viscosity index. Hy-Gard™ viscosity places it between ISO 46 and 68 grades and may be used in many applications specifying either of these viscosity grades.

## Does Hy-Gard™ maintain performance at different operating temperatures?

A polymer viscosity improver helps Hy-Gard™ retain its proper viscosity over a wide range of operating temperatures. For Hy-Gard™ to work efficiently it must flow readily through any part of the system. Oil that is too light can cause increased wear; too heavy will cause sluggish operation and lower mechanical efficiency.

## Hy-Gard™ (10W-30) Australia

Size	Part Number
5L	CP1565
20L	CP1566
205L	CP1567
1000L	CP2103

## Hy-Gard™ (10W-30) New Zealand

Size	Part Number
5L	CP1565NZ
20L	CP1566NZ
205L	CP1567NZ

## Physical Properties

Test Parameters	10W-30
Viscosity 40°C	60 cSt
Viscosity 100°C	9.4 cSt min
Viscosity Index	150
ISO Viscosity	46 - 68
Specific gravity 20/20°	0.89
Flash Point	220°C

## Service Ratings

Major diesel engine manufacturers' requirements	
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 your dealer about how Hy-Gard™ can improve your operation today!

\*An industry classification for hydraulic – transmission oil does not exist. Each manufacturer establishes a minimum requirement that oils should meet for use in their equipment. John Deere has established a JDM J20 specification for minimum tractor hydraulic fluid performance. John Deere Hy-Gard exceeds the performance of their JDM-J20 specification counterparts. John Deere's green and yellow colour scheme, the leaping deer symbol and John Deere are trademarks of Deere & Company.