



# UNIVERSAL TRANS-HYDRAULIC FLUID

## DESCRIPTION

49 NORTH® UNIVERSAL TRANS-HYDRAULIC FLUID exceeds the requirements of John Deere Specification J20C and provides excellent performance in agricultural, construction and logging equipment.

## QUALITIES

49 NORTH® UNIVERSAL TRANS-HYDRAULIC FLUID has excellent high temperature and filterability characteristics along with rust and corrosion inhibitors, water tolerance, and wide temperature range performance. It offers outstanding gear wear protection, brake chatter control, oxidation resistance and is dyed green to assist in leak detection. 49 NORTH® UNIVERSAL TRANS-HYDRAULIC FLUID has been formulated with advanced detergent/dispersant, anti-wear, anti-oxidant, anti-rust, and anti-foam additives.

## APPLICATIONS

49 NORTH® UNIVERSAL TRANS-HYDRAULIC FLUID is a multifunctional tractor hydraulic/transmission fluid which is used to lubricate transmissions, differentials and final drive gears in tractors, excavators, construction and logging equipment where John Deere and Case Fluids are specified. It also acts as a power steering, power brake, power take-off and implement drive fluid.

49 NORTH® UNIVERSAL TRANS-HYDRAULIC FLUID meets the pump performance requirements of Denison HF-0, HF-1, and HF-2. It offers performance in industrial and construction equipment calling for Allison C-3, or Caterpillar TO-2.

## TYPICAL PROPERTIES

SAE Grade	10W-20
Product Code	1669
API Gravity (ASTM D-287)	29.1
Specific Gravity, at 60° F	0.8812
Density, pounds (kg) per gallon	7.3 (3.36)
Flash Point, COC, (ASTM D 92) °F (°C)	424 (218)
Viscosity (ASTM D 445)	
cSt at 40° C	57.16
cSt at 100° C	9.46
cSt (SUS) at 210° F	9.75 (57.9)
cSt (SUS) at 100° F	63.51 (295)
Viscosity Index (ASTM D2270)	165
Brookfield Apparent Viscosity (ASTM D 2983)	
cP at -20° C Max.	4500
cP at -35° C Max.	38,500

## TYPICAL PROPERTIES

SAE Grade	10W-20
Product Code	1669
Pour Point (ASTM D 97) °F (°C)	-40 (-40)
Colour, Observed	Green
Copper Corrosion, 3 hrs. at 212° F (ASTM D 130)	1A
Rust Test, A&B (ASTM D 665)	Pass
Foam Test, ASTM D 892	Pass
Sulfur, m% (ASTM D 4294)	0.3289
Zinc, m%	0.138
Moisture, Hot Plate	Pass

## Lubricants For All Reasons