



Proudly Serving Canadian Industry Since 1984

INDUSTRIAL CIRCULATIING OIL ISO 150, 220, 320

PRODUCT CODE: 35150, 35220, 35320

DESCRIPTION

49 NORTH® INDUSTRIAL CIRCULATING OILS are turbine oils designed to give outstanding performance in steam and hydroelectric turbines.

QUALITIES

49 NORTH® INDUSTRIAL CIRCULATING OILS provide rust protection, oxidation inhibition, and foam suppression. The thermal and oxidation stability of these lubricants, due to their high level of refinement, has been further enhanced by their unique ashless, zinc-free formulation. The high thermal and oxidation stability help protect against oxidation deposit formation or the generation of acidic material.

49 NORTH® INDUSTRIAL CIRCULATING OILS pass the Fresh Water Corrosion Test (ASTM D665, Procedure A), and the severe Synthetic Sea Water Rust Test (ASTM D665, Procedure B).

49 NORTH® INDUSTRIAL CIRCULATING OILS have very good emulsibility characteristics allowing quick release of moisture, as well as minimizing entrained air which otherwise could result in low lubricant film strength between moving parts and pump cavitation.

APPLICATIONS

49 NORTH® INDUSTRIAL CIRCULATING OIL ISO 150 is recommended for use in most electric motor bearings, air compressors, gears, hydroelectric turbines, steam turbines, marine turbines, and non-heavy duty hydraulic systems where OEM recommends R&O type oils. For heavy duty hydraulic systems, customers should consider HVI Hydraulic oils.

49 NORTH® INDUSTRIAL CIRCULATING OILS can also be used as a general purpose machine oil for shop use when R&O type oil is needed or is recommended. The multifunctional characteristics may allow for replacement of other special application lubricants, which can result in reduced inventory and operating cost.

MEETS OR EXCEEDS THE FOLLOWING SPECIFICATIONS:

- ANSI /AGMA 9005-F16-RO
- DIN 51517 / 2 CL
- MORGOIL Advanced

CONTACT

Toll Free: 1.800.463.0354 Facsimile: 780.986.9650 6611 - 45 Street Leduc, Alberta Canada T9E 7E3



FEATURES & BENEFITS

Long lubricant life provided by excellent thermal and oxidation stability. Formulated with an ashless, zinc-free formulation.

Excellent demulsibility helps ensure good lubricant film strength and minimal wear through quick water separation.

Excellent air release in turbine oil reservoir systems by the foam inhibitor hastening the release of foam and entrained air.

Rust protection of metal surfaces due to the use of an effective rust and corrosion inhibitor.

Ashless and zinc-free formulation allows for reclaiming and recycling of used oils.

TYPICAL PROPERTIES

ISO Grade	150	220	320
Product Code	35150	35220	35320
API Gravity	29.8	28.5	27.5
Viscosity, Kinematic			
cSt @ 40°C	143	220	304
cSt @ 100°C	14.2	19.0	23.2
Viscosity, Saybolt			
SUS @ 100°F	750	1163	1618
SUS @ 210°F	76.4	96.8	116
Viscosity Index	96	97	95
Flash Point, °C (°F)	284 (543)	294 (561)	298 (568)
Pour Point, °C (°F)	-21 (5)	-18 (10)	-12 (10)
Oxidation Stability			
ASTM D943	>3500	>2200	>1800
ASTM D2272	>450	>425	>400

The typical properties listed reflect the general characteristics of the product, and are not manufacturing specifications. Normal batch-to-batch variations should be expected.

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HEALTH & SAFETY

A compete Safety Data Sheet (SDS) is available upon request.

PACKAGE SIZES

Available in Bulk, 1211L totes, 208L Drums, 20L Pails