



Product Name: Circulation Oil

Oil Type: Premium Mineral-Based Circulating Oil

Available Grades: ISO VG 32, 46, 68, 100

Performance Level: DIN 51517 Part 2 (CL), ISO 6743-6 Category CKB, ISO 6743-4 HL

Drain Interval: As recommended by OEM (typically 4,000–8,000 hours depending on load and temperature)

Recommended for : Pulp & paper mills , Steel and aluminum mills, Textile machinery Hydraulic or lubrication systems in large rotating equipment , Oil-lubricated electric motors and fans

Product Overview

Circulation Oil is a high-quality, **oxidation-stable mineral oil**, specifically engineered for use in **centralized lubrication and circulating systems**. It is blended with refined base oils and advanced inhibitors for **oxidation, rust, and foam**, offering reliable performance and long system life.

Provides:

- Clean system operation
- Fast air release
- Reliable lubrication under continuous flow
- Efficient separation from water and contaminants

Application

Circulation Oil is formulated for **industrial circulating systems**, including plain and anti-friction bearings, gears, pumps, compressors, and vacuum pumps operating under **moderate temperature and load** conditions. It is ideal for:

- Pulp & paper mills
- Steel and aluminum mills
- Textile machinery
- Hydraulic or lubrication systems in large rotating equipment
- Oil-lubricated electric motors and fans

Performance Benefits

- **Oxidation Stability**
Ensures long oil life in high-speed rotating systems with minimal sludge formation.
- **Excellent Rust & Corrosion Inhibition**
Protects critical components in moist and humid environments.
- **Rapid Air Release & Low Foam**
Ensures continuous oil film integrity and smooth operation.
- **Demulsibility**
Separates water quickly, maintaining lubrication performance even in wet conditions.
- **Versatile Application**
Suitable for use in both horizontal and vertical circulation systems.



Meets and approvals:

- DIN 51517 Part 2 CL
- ISO 6743-6 CKB
- ISO 6743-4 HL
- Cincinnati Machine P-38 / P-55 / P-57 (depending on viscosity)
- Denison HF-1 (where applicable)

Typical Properties

Property	Method	VG 32	VG 46	VG 68	VG 100
Density @ 15°C (g/cm ³)	ASTM D4052	0.865	0.870	0.875	0.880
Kinematic Viscosity @ 40°C (mm ² /s)	ASTM D445	32	46	68	100
Kinematic Viscosity @ 100°C (mm ² /s)	ASTM D445	5.4	6.8	8.9	11.2
Viscosity Index	ASTM D2270	≥95	≥95	≥95	≥95
Flash Point (°C)	ASTM D92	≥210	≥215	≥220	≥230
Pour Point (°C)	ASTM D97	-18	-15	-15	-12
Rust Test (A & B)	ASTM D665	Pass	Pass	Pass	Pass
Foam Test (Seq I/II/III, ml)	ASTM D892	Pass	Pass	Pass	Pass
Demulsibility (mins @ 54°C)	ASTM D1401	≤30	≤30	≤30	≤30

Storage and Handling:

- Store below 45°C in sealed containers away from moisture and direct sunlight
- Do not mix with other oils or additives unless approved
- Use clean tools and dispensing systems
- Refer to SDS for safety and environmental guidelines.

