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Product Information

Page 1 of 2

## UNIVERSAL CIRCULATING OILS

**Product Description** **Universal Circulating Oils** are premium-quality, multi-purpose, extra-duty roll bearing oils. They meet major manufacturers' requirements in circulating oil-film back-up roll bearing systems. In addition, they exhibit high Timken OK loads, and give excellent results on the FZG test. They meet or exceed the U.S. Steel 136 requirements.

**Applications** **Universal Circulating Oils** are recommended for use in oil film back-up roll bearings, in rolling mills and circulating or bath systems to lubricate many types of heavily loaded plain journal or anti-friction bearings. They can be used in reduction gears and bearings where higher loads require a more robust lubricant.

Although **Universal Circulating Oils** are primarily circulating lubricants, they can also be used in other high-load applications, except where extreme pressure is required. They are not recommended for use in automotive-type equipment applications requiring an API GL-5 or MIL-L-2105B or C type lubricant.

- Benefits**
- Extremely good foam resistance
  - Outstanding oxidation stability
  - High film strength
  - Versatile
  - Excellent low temperature flow characteristics
  - Superior water-separation
  - Excellent rust protection

Refer to Universal Oil's Material Safety Data Sheet (MSDS) [16-21-06](#) for additional information.

## UNIVERSAL CIRCULATING OILS

### Specifications

#### Typical Property

Typical Property	Test Method	Typical Results	
Grade, ISO-VG		100	320
Viscosity, cSt @ 40°C	ASTM D 445	102	328
Viscosity,			
@ 100°F	ASTM D 2161	532	1628
@ 210°F	ASTM D 2161	65.4	113
Viscosity Index	ASTM D 2270	98	92
Gravity, API	ASTM D 287	29.6	26.6
Flash, COC: F	ASTM D 92	440°	470°
Pour Point: F	ASTM D 97	+5°	+5°
Color	ASTM D 1500	L 2.5	L 7.5
Timken Test			
OK Lever Load: lb	ASTM D 2782	40	50
FZG Test	DIN 51 354		
Final Stage Passed		11	11
Rust Preventive Test, 24 hr.	ASTM D 665		
Procedure A (distilled water)		Pass	Pass
Procedure B (Synthetic seawater)		Pass	Pass

UO Item Number	16-21-06	16-21-25
MSDS Number	16-21-06	16-21-06

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