

# GOLDENSTONE® Circulating oils

## Technical Data Sheet (TDS)

### Industrial oils

#### Description and Application

The circulating oils GOLDENSTONE® are mineral oils of high grade with high resistance to oxidation and formation of sludge when subjected to rolling mill service. They are produced from advanced additive package and highly refined mineral base oils with very good inherent oxidation stability and corrosion protection and excellent water separability and air-release properties to readily release entrained water and air during service.

The circulating oils GOLDENSTONE® are primarily designated for oil-bath lubrication of plain and rolling bearings of high speed rod, bar, combination mills and handling equipment as well as rolling mill equipment systems for steel and non-ferrous industries. They can successfully be used for the lubrication of lightly loaded worn gear drives as well as in the circulating lubrication systems of paper machines.

#### Benefits

- Ensures excellent lubricating properties
- Excellent water separability and air release properties
- Corrosion protection
- High oxidation stability

#### Specifications

ISO 3448	100, 150, 220, 320, 460
ISO 6743/2	ISO-L-FC
Morgoil	Advanced Lubricant Specification. New Oil Revision 2.4, 2007
DIN 51524	Part 1, HL
DIN 51517	Part 2, CL
ISO 11158	HL
ISO 12925/1	CKB

#### Typical Characteristics

Parameter	Test Method	Typical Value		
		VG 100	VG 150	VG 220
Density at 20°C, g/ml	EN ISO 3675	0.878	0.889	0.891
Kinematic Viscosity at 40°C, mm <sup>2</sup> /s	EN ISO 3104	100	150	220
Viscosity Index	EN ISO 2909	95	95	95
Flash point COC, °C	EN ISO 2592	230	240	250
Pour point, °C	ISO 3016	-15	-12	-12
Copper strip corrosion, 3h, 100°C	EN ISO 2160	1a		
Foaming, ml (Tendency/Stability)	ASTM D 892			
-Seq I, at 24°C		50/0		
-Seq II, at 93.5°C		30/0		
-Seq III, at 24°C		50/0		
Rust preventive properties in presence of distilled water	ASTM D 665, part A	Pass		
Rust preventive properties in presence of synth sea water	ASTM D 665, part B	Pass		
Water separability	ISO 6614			
-time to 3 ml emulsion,min		15	20	20

Important note: typical data values do not constitute a specification but are an indication based on current production and can be affected by allowable production tolerances. The right to make modifications is reserved.

## Typical Characteristics-

Parameter	Test Method	Typical Value	
		VG-320	VG-460
Density at 20°C, g/ml	EN ISO 3675	0.896	0.900
Kinematic Viscosity at 40°C, mm <sup>2</sup> /s	EN ISO 3104	320	460
Viscosity Index	EN ISO 2909	95	95
Flash point COC, °C	EN ISO 2592	245	265
Pour point, °C	ISO 3016	-12	-12
Copper strip corrosion, 3h, 100°C	EN ISO 2160	1a	
Foaming, ml (Tendency/Stability) -Seq I, at 24°C -Seq II, at 93.5°C -Seq III, at 24°C	ASTM D 892	50/0 50/0 50/0	
Rust preventive properties in presence of distilled water	ASTM D 665, part A	Pass	
Rust preventive properties in presence of synth sea water	ASTM D 665, part B	Pass	
Water separability -time to 3 ml emulsion,min	ISO 6614	30	40

## Health, Safety and Handling

Based on current available information, this product is not expected to produce adverse effects on health when used for the intended application.

For more information about product MSDS, terms and conditions for storage and shelf life please visit:

<http://www.goldenstoneoils.com>

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