

Goldenstone® MZ 22E

Technical Data Sheet (TDS) Quenching Oils

Description and Application

GOLDENSTONE® MZ 22 E quenching oil is designated for use as cooling media during cold quenching of metals. The well balanced additive package ensures high cooling rates in the pearlite and low cooling rates in the martensite intervals respectively. Treated parts exhibit superior quenching depth and level of hardness of the material as well as very high cleanliness. The working temperature of the oils should not exceed 100°C.

GOLDENSTONE® MZ 22 E is formulated from narrow cut highly refined paraffinic and naphthenic type base stocks of low coking tendency blended with an appropriate high performance additive package to ensure high thermal & oxidation stability, good cooling properties to the oil and cleanliness of the quenched parts.

Benefits

- Special components which improve cleanliness of quenching parts
- Low volatility
- Low odor
- Suitable for quenching of small size parts

Specifications

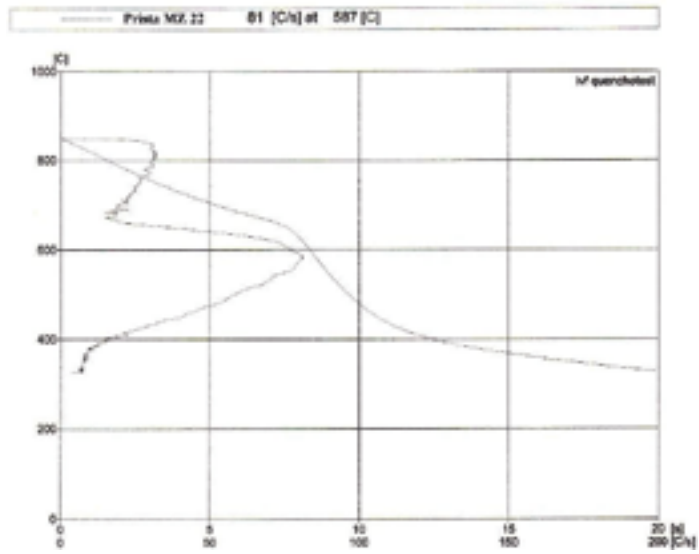
ISO 3448	VG 22
ISO 6743/14	ISO- L-UHA, ISO- L-UHB

Typical Characteristics

Parameter	Test Method	Typical Value
		Goldenstone MZ 22 E
Density at 20°C, g/ml	EN ISO 3675	0.850
Kinematic Viscosity at 100°C, mm ² /s	EN ISO 3104	22.1
Kinematic Viscosity at 40°C, mm ² /s	EN ISO 3104	4.5
Viscosity Index	ISO 2909	120
Flash point COC, °C	EN ISO 2592	210
Pour point, °C	ISO 3016	-15
Colour	ISO 2049	L1.5
Quenching Experimental Data at Temperature of 50°C		
Cooling characteristics	Quench Test	
Maximum cooling rate, °C/sec		81
Temperature @ max rate, °C		587
Rate @ 400°C, °C/sec		19.5
Rate @ 300°C, °C/sec		-
Time (s) to reach 600°C		8.2
Time (s) to reach 400°C		12.5

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.

Table 2. Cooling curves for GOLDENSTONE® MZ 22 E



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:

www.goldenstoneoils.com