

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

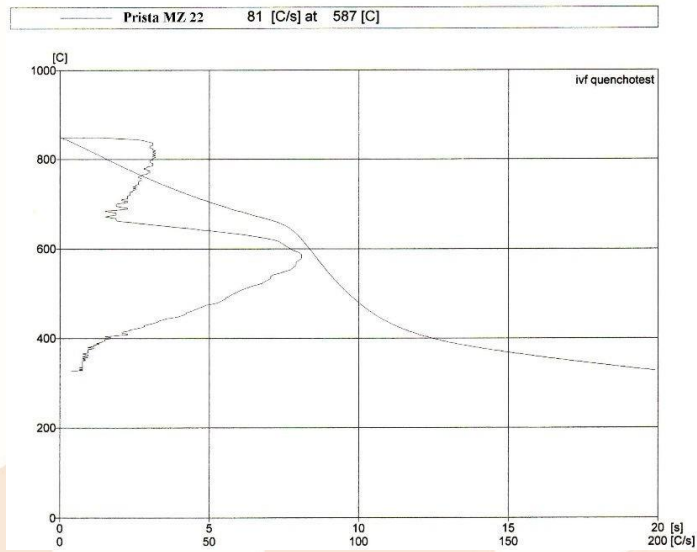
| | |
|-------------|---------------------------|
| ISO 3448 | VG 22 |
| ISO 6743/14 | ISO- L-UHA, ISO- L-UHB |

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

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