Product Data Sheet

Mobil Velocite Oil Numbered Series

High Speed Spindle and Hydraulic Oils

Product Description

The Mobil Velocite Oils are a range of high quality light viscosity lubricants for high speed machine tool spindles and hydraulic applications.

Mobil Velocite Oil No. 3 is made from a light petroleum solvent refined mineral oil and an oxidation inhibitor. Mobil Velocite Oil No. 6 and No. 10 are made from light viscosity solvent refined mineral oils, oxidation inhibitors and a rust inhibitor and a defoamant. Some anti-wear protection is also provided.

Benefits

The Mobil Velocite Oils offer the following benefits:

- Protection against wear
- Good hydraulic performance
- Resistant to oxidation and degradation products
- Protection against rust and corrosion
- Low spindle wear
- Maintained high precision
- Minimum scrap and off-sized components
- Long trouble-free life

Applications

The Mobil Velocite Oils are recommended for lubricating high speed machine tool spindles.

Mobil Velocite Oil No. 3 is recommended for the 'zero clearance' type of spindle bearing which operates with extremely close clearances - which may be no more that 0.0001" per inch of arbor diameter.

The majority of sleeve type spindle bearings have greater clearances and for these Mobil Velocite Oil No. 4, No. 6 and No. 10 are recommended. Choice of viscosity depends upon relationship between clearance and spindle speed. High speed and close clearance require Mobil Velocite Oil No. 4 - slower speed and wider clearance require Mobil Velocite Oil No. 10

Mobil Velocite Oil No. 3 is also recommended for use in EDM applications where its low viscosity and electrical characteristics, together with resistance to degradation, make it an ideal cooling and flushing medium.

Mobil Velocite Oil No. 6 and No. 10 are also suitable for use in hydraulic systems that do not require 'anti-wear' oils.

Properties

All these oils contain oxidation inhibiting materials enabling them to resist the production of deposits and degradation materials under the high speed - extremely thin film - oxidation prone conditions under which they work.

In addition Mobil Velocite Oil No. 6 and No. 10 contain a rust inhibitor making them suitable for intricate and critical hydraulic systems requiring a light oil. Both have excellent chemical stability, resistance to oxidation and formation of degradation products and contain a defoamant. They have a high viscosity index and separate readily from water.

Health and Safety

Based on available toxicological information, it has been determined that this product poses no significant health risk when used and handled properly.

Details on handling, as well as health and safety information, can be found in the Material Safety Data Bulletin which can be obtained through Mobil Oil Company Ltd., by telephoning 01372 22 2000.

Typical physical characteristics are given in the table. These are intended as a guide to industry and are not necessarily manufacturing or marketing specifications.

Product Characteristics

Mobil Velocite Oil	No. 3	No. 4	No. 6	No. 10
ISO Viscosity Grade	2	5	10	22
Viscosity, cSt at 40°C	2.0/2.4	4.8	10.0	22.0
Viscosity, cSt at 100°C	-	1.63	2.6	4.1
Viscosity Index	-	-	95	95
Flash Point, °C COC	76	114	154	174
Pour Point, °C	-30	-24	-30	-27

Due to continual product research and development, the information contained herein is subject to change without notice

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