Product Data

## Castrol Magna Range

Slideway oils

## Description

Castrol Magna ${ }^{\text {TM }}$ GC 32, BD 68 and CF 220 are specially formulated slideway lubricants to provide all-round performance with good stick-slip and load carrying performance. They combine controlled frictional characteristics with high film-strength and high load carrying properties to eliminate 'stick-slip'.

## Application

Magna GC 32 is a light viscosity, combined hydraulic and slideway lubricant. Applications include lightly loaded slideways such as found on small centre lathes and combined hydraulic and slideway systems such as in reciprocating grinding machines.

Magna BD 68 is a medium viscosity slideway lubricant suitable for use in most machine tool lubrication systems specifying an ISO VG 68 oil. It meets Cincinnati Milacron P47 specification.

Magna CF 220 is formulated for use with heavily loaded slideway applications or where there is a vertical or inclined slideway. It meets Cincinnati Milacron P50 specification.

## Advantages

- Good lubricity - prevents stick-slip of slideways.
- High load carrying capacity - prevents wear of highly loaded slideways.
- Good demulsification and cutting fluid compatibility - can be used in the presence of water or water based metalworking fluids.


## Typical Characteristics

| Test | Method | Units | GC 32 | BD 68 | CF 220 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ISO viscosity grade | - | - | 32 | 68 | 220 |
| Density @15 $5^{\circ} \mathrm{C}$ | $\begin{gathered} \text { ISO } 12185 / \mathrm{ASTM} \\ \text { D4052 } \\ \hline \end{gathered}$ | $\mathrm{g} / \mathrm{ml}$ | 0.87 | 0.88 | 0.89 |
| Viscosity $@ 40^{\circ} \mathrm{C}$ | ISO 3104 / ASTM D445 | $\mathrm{mm}^{2}$ /s | 32 | 68 | 220 |
| Viscosity @ $100^{\circ} \mathrm{C}$ | ISO 3104 / ASTM D445 | $\mathrm{mm}^{2}$ is | 5.3 | 8.7 | 19.2 |
| Viscosity Index | 1802909 /ASTM 2270 | - | 96 | 99 | 98 |
| Pour point | ISO 3016 /ASTM D97 | ${ }^{9} \mathrm{C} /{ }^{\text {a }} \mathrm{F}$ | -15/5 | -12/10 | -9/15 |
| Flash point, COC | ISO 2592 /ASTM D92 | ${ }^{\circ} \mathrm{C} /{ }^{\circ} \mathrm{F}$ | 206/403 | 232/450 | 249/480 |
| Rust test <br> Procedure A (Distilled Water) <br> Procedure B (Synthetic sea water) | $\begin{gathered} 1 S O 7210 / \mathrm{ASTM} \\ \text { D665日 } \end{gathered}$ | - | Pass <br> Pass | Pass <br> Pass | Pass <br> Pass |
| Copper corrosion (3 hrs @100 ${ }^{\circ} \mathrm{C}$ ) | ISO 2160 /ASTM D130 | - | 1b | 1b | 1b |
| Brugger value | DIN 51347 | ${\mathrm{N} / \mathrm{mm}^{2}}^{2}$ | - | 33 | - |
| Four Ball Wear Test $\left(40 \mathrm{~kg}, 75^{\circ} \mathrm{C} / 167^{\circ} \mathrm{F}\right.$, $1800 \mathrm{rpm}, 1 \mathrm{hr})$, scar diameter | ASTM D2266 | mm | - | 0.42 | 0.42 |
| Four Ball Extreme Pressure Test weld load | ASTM D2783 | kg | - | 280 | 280 |
| Stick-slip ratio | (Cincinnati Lamb) | - | - | 0.74 | 0.74 |
| Cincinnati Lamb specification |  |  | - | P-47 | P-50 |

Subject to usual manufacturing tolerances.

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