



Product Data

## Hysol 31 BF

High performance semi-synthetic metalworking fluid

### Description

Castrol Hysol™ 31 BF is a high performance semi-synthetic metalworking fluid formulated without boron and formaldehyde releasing agents. It contains an additive package that works in synergy to enhance machining performance and surface finish, provide good product stability and helps to lower the overall operations costs.

Hysol 31 BF is suitable for large central systems and single sump machines.

### Application

Castrol Hysol 31 BF is especially designed for machining of cast iron and low-medium alloyed steel.

ü ü suggested core application ü possible application, please consult Castrol representative prior to use

|                                      | Cast Iron | Low-medium alloyed steel | High alloyed - stainless steel | Aluminium alloys | Yellow metals |
|--------------------------------------|-----------|--------------------------|--------------------------------|------------------|---------------|
| Grinding                             | ü ü       | ü ü                      | ü ü                            |                  |               |
| Milling, Turning (general machining) | ü ü       | ü ü                      | ü                              |                  |               |
| Drilling                             | ü ü       | ü                        |                                |                  |               |
| Boring, Tapping                      | ü ü       | ü                        |                                |                  |               |

### Advantages

- Formulated without formaldehyde releasing agent and boron which help you to fulfil aspects of legislative requirements and waste treatment requirements that specify that these chemicals are excluded
- Extended fluid life can help to reduce maintenance and downtime
- Low foam in recommended water conditions (see details below)
- Excellent anti-corrosion properties help to protect machine tools and parts
- Good wetting properties can help to reduce coolant drag out and help deliver cleaner machine tools and components

## Typical Characteristics

|                           | Test Method              | Unit | Value                        |
|---------------------------|--------------------------|------|------------------------------|
| <b><u>Concentrate</u></b> |                          |      |                              |
| Colour                    | Visual                   |      | Amber                        |
| Mineral oil content       | Calculated               | Wt%  | 30                           |
| <b><u>Emulsion</u></b>    |                          |      |                              |
| Appearance                | Visual                   |      | Transparent -<br>Translucent |
| pH (5%)                   | DIN 51369<br>ASTM E70-97 |      | 9.5                          |
| Refractometer Factor      |                          |      | 1.2                          |

Subject to usual manufacturing tolerances.

## Recommended Concentrations

|                     |                               |
|---------------------|-------------------------------|
| Grinding            | 4-6%                          |
| General Machining   | 5-7%                          |
| Drilling            | 6-8%                          |
| Reaming and tapping | 6-8%                          |
| Broaching           | 6-8%                          |
| Water range         | 100-500 ppm CaCO <sub>3</sub> |

## Storage

To avoid product deterioration always keep the container/drum tightly sealed. Store the product in a cool, dry place away from direct sunlight. Prevent exposure to frost and avoid water ingress. For optimum product stability, it is preferable to store the product indoors between 5°C and 45 °C / 41°F and 113°F.

For more details, please refer the product safety data sheet.

Hysol 31 BF  
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