

Product Data

Hysol™ ABF 12

High performance soluble metalworking fluid

Description

Castrol Hysol™ ABF 12 (previously called Cooledge™ ABF 12) is a high performance soluble metalworking fluid which is boron, amine, chlorine and formaldehyde releasing agent free. It contains a unique additive package that works in synergy to enhance machining performance and surface finish, provide excellent product stability, improve bioresistance properties and lower the overall operations costs.

Hysol ABF 12 is suitable for large central systems and single sump machines.

Application

Hysol ABF 12 is especially designed for cast iron and low-medium alloyed steel machining. It can also be used for machining of aluminium and magnesium alloys.

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

| | Cast Iron | Low-medium alloyed steel | High alloyed - stainless steal | Aluminium alloys | Magnesium alloys | Yellow Metals |
|---|-----------|--------------------------|-----------------------------------|------------------|---------------------|---------------|
| Grinding | | | | | | |
| Milling, Turning (general Machining) | ü | üü | ü | üü | üü | ü |
| Drilling | ü | üü | | üü | üü | ü |
| Reaming, Tapping | ü | ü | | ü | üü | ü |
| Broaching | ü | ü | | ü | üü | ü |

Advantages

- Formaldehyde releasing free to comply with health and safety regulations
- Boron free for environmental compliance and improved residue characteristics
- · Chlorine and nitrite free to fulfill your local legislation, waste treatment and environmental requirements
- Resists fungal attack to extend fluid life and reduce maintenance and machine downtime
- Low foam in recommended water conditions
- · Lubrication package specifically designed to enhance tool life and improve surface finish
- Excellent wetting properties reduce coolant drag out and deliver clean machine tools and components
- Unique multi-functional product for multi-metal operations results in product consolidation

Typical Characteristics

| Name | Method | Unit | Hysol ABF 12 | | | |
|----------------------|--------------------------|------|--------------|--|--|--|
| Concentrate | | | | | | |
| Appearance | Visual | | Amber | | | |
| Mineral Oil content | Calculated | Wt% | 47 | | | |
| <u>Emulsion</u> | <u>Emulsion</u> | | | | | |
| Appearance | Visual | | Milky | | | |
| pH(5%) | ASTM E70-97 DIN 51361 | | 9.1 | | | |
| Refractometer Factor | - | | 1 | | | |

Subject to usual manufacturing tolerances.

Recommended Concentrations

General machining 7-9%
Drilling 7-10%
Reaming and tapping 8-12%
Broaching 8-12%

Water Range 200-1500ppm CaCO₃

Additional Information

| | Boron | Formaldehyde releasing agent | EP - Ester | Amines | Chlorine |
|-----------|-------|------------------------------|------------|--------|----------|
| Additives | | | ü | | |

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.

This product was previously called Coolegde ABF 12. The name was changed in 2015

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