



# Alusol ABF 5

High performance soluble metalworking fluid

## Description

Castrol Alusol™ ABF 5 is a high performance semi synthetic 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 bio-resistance properties and lower the overall operations costs.

Alusol ABF 5 is suitable for large central systems and single sump machines.

## Application

Alusol ABF 5 is especially designed for machining of aluminium alloys. It can also be used for machining of 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	Magnesium alloys	Yellow metals
Grinding		ü	ü	ü		
Milling, Turning (general machining)	ü	ü ü	ü ü	ü ü		ü
Drilling	ü	ü ü	ü	ü ü		ü
Reaming, Tapping	ü	ü ü		ü ü		ü
Broaching	ü	ü		ü ü		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 in aluminium machining
- Excellent wetting properties reduce coolant drag out and deliver clean machine tools and components
- Multi-functional product for multi-metal operations results in product consolidation

## Typical Characteristics

Name	Method	Units	Alusol ABF 5
Concentrate	-	-	-
Appearance	Visual	-	Amber
Mineral oil content	Calculated	Wt%	43
Emulsion	-	-	-
Appearance	Visual	-	Milky
pH (5%)	DIN 51369 ASTM E70-97	-	9.1
Refractometer Factor	-	-	1.0

## Recommended Concentrations

General Machining	6-8%
Drilling	6-8%
Reaming and tapping	7-10%
Broaching	8-12%
Water range	100-800 ppm CaCO <sub>3</sub>

## 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.

Alusol ABF 5  
09 Dec 2014  
Castrol, the Castrol logo and related marks are trademarks of Castrol Limited, used under licence.

This data sheet and the information it contains is believed to be accurate as of the date of printing. However, no warranty or representation, express or implied, is made as to its accuracy or completeness. Data provided is based on standard tests under laboratory conditions and is given as a guide only. Users are advised to ensure that they refer to the latest version of this data sheet. It is the responsibility of the user to evaluate and use products safely, to assess suitability for the intended application and to comply with all applicable laws and regulations. Material Safety Data Sheets are available for all our products and should be consulted for appropriate information regarding storage, safe handling, and disposal of the product. No responsibility is taken by either BP plc or its subsidiaries for any damage or injury resulting from abnormal use of the material, from any failure to adhere to recommendations, or from hazards inherent in the nature of the material. All products, services and information supplied are provided under our standard conditions of sale. You should consult our local representative if you require any further information.

Castrol Industrial, Technology Centre , Whitchurch Hill , Pangbourne , Reading , RG8 7QR , United Kingdom

[www.castrol.com/industrial](http://www.castrol.com/industrial)