



# Alusol SL 51 XBB

High performance soluble metalworking fluid

## Description

Castrol® Alusol® SL 51 XBB is a high performance soluble metalworking fluid which is boron, formaldehyde releasing agent and chlorine free. It contains an additive package that may help to enhance machining performance and surface finish. It also provides excellent product stability which helps to lower the overall operational costs.

Alusol SL 51 XBB is suitable for large central systems and single sump machines.

## Application

Alusol SL 51 XBB is especially designed for machining of aluminum alloys. The product can also be used for machining of ferrous alloys.

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		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		ü
Broaching	ü			ü ü		ü

## Advantages

- Boron free to meet boron free waste requirements
- Chlorine, formaldehyde releasing agent and nitrite free which may help you to fulfill aspects of legislative requirements and waste treatment requirements that specify that these chemicals are excluded
- Extended fluid life can help reduce maintenance and machine downtime
- Low foam in recommended water conditions (see details below)
- Lubrication package designed to try to help to enhance tool life and improve surface finish on aluminium machining
- Good wetting properties can help reduce coolant drag out and help deliver cleaner machine tools and components
- Suitable for a wide range of materials and applications provides opportunity for product consolidation

## Typical Characteristics

	Test Method	Units	Value
<b>Concentrate</b>			
Appearance	Visual		Amber
Specific Gravity 15°C	ASTM D4052	g / cm <sup>3</sup>	0.94 - 0.96
<b>Emulsion</b>			
Appearance	Visual		Milky
pH (5% in DI water)	CN - TM - 069		9.2 - 9.8
Refractometer		BRIX unit multiplier	1.0

## Recommended Concentrations

Grinding	6-7%
General Machining	6-8%
Drilling	7-9%
Reaming and tapping	8-10%
Broaching	8-10%

Water range 100-800 ppm CaCO<sub>3</sub>

## Concentration Control

Refractometer Factor (multiplier) = 1.0

To calculate the concentration of the diluted fluid, multiply the Refractometer reading by the factor.

## Additional Information

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

## Storage

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

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

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