



Product Data

Alusol SL 51 XBB

High performance soluble metalworking fluid

Description

Castrol® Alusol® SL 51 XBB is a high performance soluble metalworking fluid formulated without boron, biocides, formaldehyde releasing agents, chlorine and secondary amines/DCHA. 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 formulated specially for machining of aluminum alloys and magnesium. However, it is also well suited 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	Aluminum 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

- Formulated without Boron, Chlorine, Biocides and Formaldehyde releasing agents which may help fulfill legislative and waste treatment requirements that specify exclusion of these chemistries
- Formulated without Secondary Amines / DCHA to help fulfill local requirements that exclude these chemistries
- Extended fluid life can help reduce maintenance and machine downtime
- Low foam in recommended water conditions (see details below)
- Lubrication package designed to help to enhance tool life and improve surface finish on aluminum 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
Concentrate			
Appearance	Visual		Amber
Mineral oil content	Calculated	Wt%	50
Emulsion			
Appearance	Visual		Milky
pH (6%)	DIN 51369 ASTM E70-97		9.6
Refractometer Factor			1.0

Recommended Concentrations

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

Recommended water hardness range 100-800 ppm CaCO₃

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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