

MAK FORM BL

Superior quality forming oil for blanking and fine blanking applications of Steel

MAK Form BL has been specially designed for blanking application of steel. It is formulated from select base stocks and advanced additive system. Multifunctional additives impart good antiwear and inactive type extreme pressure characteristics. Clean cut, surface finish and tool life depend on the lubrication at the tool and work piece interface. The chosen lubricity additive ensures reduction of friction at the contact point and exhibits outstanding performance in fine blanking application. The special additive chemistry helps providing low residue, corrosion protection and extended operating life. The formulation is based on non-active chemistry.

Applications:

MAK Form BL is a high density neat forming oil for all grades of steel. This medium viscosity oil is recommended for blanking, fine blanking and stamping applications. It is suitable for non-ferrous metals also. It forms an extremely strong lubricating film. It provides proper lubrication in high speed forming applications.

Recommended Use	Cast Iron	Alloy Steel	Carbon Steel	Al. Alloy	Yellow Metals
Forging					
Stamping,		√√	VV		\checkmark
Blanking, fine					
Blanking					

 $\sqrt{\sqrt{\text{Main applications}}}$, $\sqrt{\text{Check with supplier}}$

Performance/ Benefits:

Excellent Wear Protection – excellent protection to the work piece and tool. Operates on a varying thickness of work piece and wide range of load conditions.

Excellent EP property – inactive sulphur provides excellent ability to withstand higher loads and shock loads encountered in the blanking and stamping applications. It provides protection to tool and also ensures superior surface finish to the job.

Good Surface Finish – superior quality oiliness and wear protection additives along with the ability to block environment moisture provide very good surface finish.

Excellent Lubricity – contains fatty oil to provide excellent lubricity and to reduce friction. It improves the surface finish and extends tool life.

Low Deposit Formation – leaves little or no deposit on the work piece and the die. Ensures dimensional geometry and cleaner work piece.

Specification:

Proprietary Grade

Typical Physico-Chemical Data: MAK Form BL

Characteristics	Method	Value
Appearance	Visual	Clear & Bright
Colour	Visual	Brown
Density, g/cc @15°C	ASTM D1298	1.150
Copper Corrosion, 100°C, 3 hrs.	ASTM D130	1a
Flash Point, COC, ^o C	ASTM D92	190
Kinematic Viscosity @40°C, cSt	ASTM D445	115.0
Weld Load, kg	ASTM D2783	>800

Additive:

Ester	Fatty Oil	Zinc	Sulphur	EP	Phosphorus
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Storage & Handling:

The product should be stored inside. Keep it properly sealed to avoid contamination. Avoid freezing. Shelf life is 3 yrs. under protected storage conditions.

Health & Safety:

It is unlikely to be hazardous when properly used in recommended applications. Contamination of the oil from other oils, greases, chemicals, dirty water etc. can occur during the use. It should be avoided. Regular monitoring of the in-use product is recommended.