

# MAK FORM AL LITE

## Low viscosity Aluminium wire drawing oil

MAK FORM AL LITE is low viscosity product specially designed for wire drawing of Aluminium and its alloys. It is blended from highly refined, severely hydroprocessed base stock fortified with special anti-wear, EP additives and lubricity esters. The selected combination of additives impart excellent wetting properties thus improves the surface finish and die life. It has low carbon residue forming tendency and also exhibits resistance to ageing thus extends the oil life.

### Applications:

MAK FORM AL LITE is a fine wire drawing oil for Aluminium and Aluminium alloys in multi die machines. It can also be used as top-up fluid for lowering the viscosity of MAK FORM AL bathes thereby extending the oil life. It forms strong lubricating film on the bearings and pulley even at elevated temperatures.

### Performance/ Benefits:

**Excellent EP property** – Inactive Sulphur provides excellent load carrying ability in the drawing application. It provides protection to die and wheel.

**Outstanding Thermal and Oxidation Resistance** – Prevents the formation of sludge and carbon residue. Enhances oil life and reduces the cost of operation.

**Excellent Lubricity** – Superior quality wetting agents and anti-wear additives reduce friction at contact area and provide very good surface finish.

**Antifoaming Characteristics** – Prevents foam generation during operation and helps maintaining continuous oil film between moving parts.

**Excellent Rust Protection** – Rust and corrosion protection for both die and work materials.

**Low Volatility** – Excellent resistance to evaporation even at high temperatures thus reduces consumption.

**Low Oil Mist Characteristics** – Possesses low mist and smoke formation tendency and provides good working environment.

**Low Viscosity** – Helps in separation of Aluminium fines and maintains pumpability for longer period.

**Washability** – Possesses good washability that facilitates easy removal of oil using mild alkaline or solvent cleaners.

### Specification:

- Proprietary Grade

### Typical Physico-Chemical Data: MAK Form AL LITE

Characteristics	Method	Typical Value
Appearance	Visual	Clear
Colour	Visual	Brown
Density, g/cc @15°C	ASTM D 1298	0.846
Kinematic Viscosity @40°C, cSt	ASTM D 445	14.0
Copper Corrosion, 100°C, 3 hrs.	ASTM D130	1a
Flash Point, COC, °C	ASTM D92	180

### Additive:

Ester	Fatty Oil	Zinc	Inactive Sulphur	Chlorine	Phosphorus
--	√	--	√	--	√

### 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.