



**SPECIAL GRADE ALUMINUM ROLLING LUBRICANTS
MOTOROL ARL - F**



Introduction:

MOTOROL Aluminum Rolling Lubricants (ARL) are produced from low sulphur petro products. They provide good cooling and lubrication during metal reduction operation with low evaporation loss. The special boiling range ensures power economy by keeping the temperature of annealing furnace lower. Also it resists brown staining on the foils.

Applications:

Being a specialized product, it is used as roll coolant and lubrication for aluminum during reduction (rolling) operation. It is normally compounded with anti-oxidant and also with fats, alcohol for attaining load bearing characteristics. Its application is in aluminum rolling mills.

- ◆ Motorol ARL-F is specially used when a low annealing furnace temperature is required.
- ◆ For foil to foil reduction

Advantages:

- ◆ Low viscosity ensures proper washing of aluminum foils.
- ◆ Low sulphur low acidity, low aromatics
- ◆ Resist to brown staining on metal during annealing
- ◆ Low evaporation loss because of compact boiling range
- ◆ Compatible with load bearing additives like fats and alcohols
- ◆ Non- irritant and low ash content
- ◆ Good oxidation stability

Can also be supplied as per US FDA regulations

Performance Standard:

Proprietary grade

Typical Specifications:

Sr. No.	Characteristics	Test Methods	Typ. Value
1	Kinematic Viscosity at 40 °C, cSt	ASTM D 445	1.0 ± 0.5
2	Flash point, °C Min	ASTM D 92	55
3	Pour Point °C Max	ASTM D 97	-10
4	Boiling range: IBP, °C FBP, °C	ASTM D 86	165 225
5	Aluminum Stain Test	-	Passes
6	Acidity, mg KOH/g, Max	ASTM D 974	0.002
7	Sulphur Content %, Max	-	0.005

Environment, Health & Safety:

Every care has been taken to ensure the accuracy of the information in this PDS. This however may be affected by subsequent improvement in product (R&D). MSDS is available for all MOTOROL products on request.

MOTOROL products are unlikely to present any health and safety hazard with proper use for the correct application and maintain proper personal hygiene. Do not Spill oils on the shop floor, discharge into drains ,ground or water sources.