

Product Denomination: **PETRAL F**

Issue Version: 13.03.2006

PETRAL F is produced from selected feedstock of kerosene and/or gas oil. It has a pure and linear paraffinic based structure and complies with the purity standards of the U.S. Food and Drug Administration (FDA 178 3620 b). Low sulphur content and low toxicity & odor makes Petroyağ Petral F more preferable when compared to others.

The product is specially developed for foil and also for aluminum sheet production.

CHARACTERISTICS:

- Good viscosity
- High flash point (high initial boiling point)
- Low final boiling point
- Oxidation stability

In comparison to conventional oils, **PETRAL F** performs;

- High rolling speed
- No residual after annealing
- Longer shelf life
- Good viscosity for thin foils
- No unsaturated hydrocarbons susceptible to oxidation
- Environmentally friend

PRODUCT COMPOUNDS INFORMATION

Base oils (PETRAL F); act as coolants and lubricants and they have the function to disperse the additives. They must exhibit excellent heat transfer characteristics, so that rolling speed can be increased without causing any heat related problems. Petral F, with its specialized structure, provides protection against corrosion and it minimizes the friction in the roll bite.

To increase the reduction capacity and adhering to the aluminum surface, contrast surface cracks and film breakages an additive is strongly recommended. Fatty alcohol based additives, increases load bearing capacity with a low influence on the lubricity of the Petral F.

Adding antioxidant is also recommended to increase the thermal stability and to reduce the ageing of the rolling fluid.

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Properties	Test Methods	Typical Values	Specifications
Appearance at 15 °C		Clear liquid	-
Odour		None	-
Colour Saybolt	ASTM D 156	> +30	+ 30 min
Density at 15 °C (kg/l)	ASTM D 1298	0.764	-
Kinematik Viscosity at 20°C (cSt)	ASTM D 445	2.75	-
Pour Point (°C)	ASTM D 97	-3	-
Flash Point, PMCC (°C)	ASTM D 93	96	-
Carbon Distribution (% Mass)	ASTM D 2140		-
	C 12	0.3	1 max.
	C 13	60	55-65
	C 14	38	35-45
	> C 14	0.3	1 max.
Average Molecular Mass	ASTM D 2502	190	-
Distillation Range at 1.013 bar	ASTM D 86		-
I.B.P (°C)		228	-
F.B.P (°C)		245	-
Total n-Paraffins (%Mass)	ASTM D 2502	98.6	98 min.
Aromatics (%Mass)	ASTM D 2140	0.3	0.5 max.
Sulphur (ppm)	ASTM D 2622	< 1	1 max.
Bromine Index (mg Br ₂ /100 g)	ASTM D 1491	15	20 max.
Aniline Point (°C)	ASTM D 611	89	-