



# Transformer & Electrical Oils

## hyrax® Elektrans I



### Description

**Hyrax Elektrans I** transformer oil is a premium uninhibited mineral insulating oil made from a severely hydrotreated wax-free naphthenic oil which is good as a dielectric and coolant. It has very good low temperature fluidity, high flash point and chemical stability.

### Performance

- ASTM D3487-2016, Type I

### Benefits

**Hyrax Elektrans I** is manufactured from carefully selected naphthenic base stock that provides cooling, insulating and arc quenching properties while meeting the requirements defined in ASTM D3487. Its inherent cooling, chemical stability and high sludge solubilizing effects provides excellent performance in transformers, switchgears, capacitors and other liquid filled electrical equipment. It features:

- Excellent impulse strength
- Excellent oxidation stability
- Low static charging tendency
- Non carcinogenic & PCB free
- Low dissipation power factor (power factor)

### Typical Characteristics

Properties	Method	Min. Spec	Max. Spec	Values
<b>Physical</b>				
Aniline Point, °C	ASTM D611	63		75
Specific Gravity, 15°C/15°C	ASTM D4052		0.91	0.892
Viscosity @ 40°C	ASTM D445		12.0	10.0
Viscosity @ 100°C	ASTM D445		3.0	2.3
Flash Point, °C	ASTM D92	>145		>148
Pour Point, °C	ASTM D97		-40	-55
Color	ASTM D1500		0.5	0
Interfacial Tension, @ 25°C dynes/cm	ASTM D971	40		45
<b>Chemical</b>				
Total Acidity No, mgKOH/g	ASTM D974		0.03	0.003
Corrosive Sulphur	ASTM D1275 B	Non Corrosive		Non Corrosive
Antioxidant Additive, wt%	ASTM D2668		0.08	<0.08
Water Content, PPM	ASTM D1533		35	<20
PCB Content, mg/kg	ASTM D4059	Non Detectable		Non Detectable
<b>Electrical</b>				
Dielectric Dissipation Factor at 100°C, %	ASTM D924		0.3	0.01
Dielectric Breakdown Voltage at 60Hz, kV	ASTM D1816			
VDE Electrode - 1 mm gap		20		>40
- 2 mm gap		35		>70
Gassing Tendency, microL/min	ASTM D2300B		+30	+20
<b>Oxidation Stability</b>				
After 164h @ 110°C	ASTM D2440			
-Sludge, Wt%			0.3	0.2
-Total Acid No, mgKOH/g			0.6	0.4