



# Transformer & Electrical Oils

## hyrax® Hypertrans



### Description

**Hyrax Hypertrans** 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

- IEC 60296:2012
- ASTM D1275, Method B
- DIN 51353
- IEC 62535

### Typical Characteristics

Properties	Method	Min. Spec	Max. Spec	Values
<b>Function</b>				
Viscosity, cSt at 40°C	ISO 3104		12.0	8.97
Viscosity, cSt at -30°C	ISO 3104		1,800	1,284
Pour Point, °C	ISO 3016		-40	-55
Water Content, PPM	IEC 60814		30 / 40*	20
Breakdown Voltage, kV	IEC 60156	30 / 70**		60
Density at 20°C, g/ml	ISO 12185		0.895	0.893
DDF at 90°C	IEC 60247		0.005	0.0002
<b>Refining / Stability</b>				
Appearance	Visual	Clear & Bright		Clear & Bright
Acidity, mgKOH/g	IEC 60201-1		0.01	0.005
Interfacial Tension, dynes/cm	IEC 62961	No general requirement		45
Potentially Corrosive Sulphur	IEC 62535	Non Corrosive		Non Corrosive
DBDS	IEC 62697-1	Not Detectable (<5 mg/kg)		Not Detectable
Inhibitors of IEC 60666	IEC 60666	Not Detectable (<0.01%)		Not Detectable
Metal Passivator Additives mg/kg	IEC 60666	Not Detectable (<5 mg/kg)		Not Detectable
2-Furfural Content, mg/kg	IEC 61198	Not Detectable (<0.05 mg/kg)		Not Detectable
<b>Performance</b>				
Oxidation Stability at 120°C, 164 hrs	IEC 61125 C			
Total Acidity, mg KOH/g			1.2	0.9
Sludge, %			0.8	0.2
DDF at 90°C			0.5	0.45
<b>Health, Safety and Environment (HSE)</b>				
Flash Point, PMCC, °C	ISO 2719	>135		>145
PCA Content, %	IP 346		3	< 3
PCB Content, mg/kg	IEC 61619	Not Detectable (<2mg/kg)		Not Detectable

*Note: 30 / 40 \* – 30 PPM for Bulk Delivery / 40 PPM for Drum Delivery  
30 / 70 \*\* – 30 kV for untreated / 70 kV for treated*

### Benefits

**Hyrax Hypertrans** is manufactured from carefully selected naphthenic base stock that provides cooling, insulating, arc quenching and cleaning properties while meeting the requirements defined in IEC 60296:2012. 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
- Low dissipation power factor (power factor)
- Non carcinogenic & PCB free