



## SCOPE HIVOLT BS 148 TRANSFORMER OIL

SCOPE Hivolt BS 148 Transformer Oil is an uninhibited Transformer oil class IA confirms to IEC 296: 1982 class 1A and BS 148: 1998 class 1A requirements.

### Typical Properties & characteristics.

Test Description	Test Method	Specification Limits	Typical Values
Appearance	CL 7.1 of IEC 296-82/BS 148-1998	Transparent clear, odorless liquid free from suspended impurities	
Kinematic Viscosity, mm <sup>2</sup> /S (Max)			
At 40 °C	BS EN ISO 3104	16.5	9.44
At -15 °C	BS EN ISO 3104	800	298
Flash Point °C, (min), PMCC	BS EN 22719	140	168
Pour Point °C	BS 2000 (P: 15)	≤ -30	-36
Density Kg/dm <sup>3</sup> , @ 20 °C (Max)	BS EN ISO 3675	0.895	0.821
Neutralization Value mg KOH/g (Max)	CL . 7.6 of BS 148-98	0.03	Nil
Corrosive Sulfur	ISO 5662/BS 5680	Non Corrosive	Non Corrosive
Water Content, Max mg/Kg	IEC 60814		
a) Bulk		20	14
B) Drum		30	22
Anti- Oxidant Additives (Sub Clause 2.5)	IEC 60666/BS 5984	0.15 – 0.4%	0.3%
Oxidation Stability (Induction Period), hrs (Min)	IEC 60474	120	195
Oxidation Stability, 164 hrs	BS EN 61125:1993	0.25	0.05
Total Acidity, mg KOH/g of oil (Max) sludge, % by mass (Max)	(Method C)	0.01	Nil
Break Down Voltage, Min.	BS EN 60156		
As delivered (Kv), min		30	70
After treatment (Kv), min (For IEC 296)		50	-
Dielectric Dissipation factor at 90 °C and 40 to 60 Hz (Max)	BS 5737	0.005	0.0005
Gassing tendency at 50 Hz after 120 Min. mm <sup>3</sup> /min, Method A (Max)	BS 5797	+8	+1
Total PCB content mg/kg	BS EN 61619	Not detectable	Not detectable
Total Furans mg/Kg, Max	BS 61198	1.00	Nil
Polycyclic Aromatics % mass, Max	BS 2000 (P:346)	3.00	0.5

