

# Product Test Report

Product: TVAI-30°C Transformer Oil

Standard: IEC 60296-2020

Item		Specification	Result	Standard	
LCSET		-30			
Function	Pour point, °C	≤ -40	<-40	ISO 3106	
	Viscosity, 40°C, mm <sup>2</sup> /s	≤ 12	7.818	ISO 3104	
		≤ 1800	1340		
	Water content, mg/Kg	≤ 30/40	6.5	IEC 60814	
	Breakdown voltage, Before treatment, kV	≥ 30/70	74.1	IEC 60156	
	Density(20°C) , kg/m <sup>3</sup>	≤ 895	874.9	ISO 12185	
DDF at 90°C		≤ 0.005	0.00021	IEC 60247	
Refining/stability	Colour	≤ 0.5	L 0.5	ISO 2049	
	Appearance	Clear,free from sediment	Clear,free from sediment	-	
	Acidity, mgKOH/g	≤ 0.01	0.006	IEC 62021	
	Interfacial tension, mN/m	≥ 43	46.0	IEC 62961	
	Corrosive sulphur	non-corrosive	non-corrosive	DIN 51353	
	Total sulfur, %	≤ 0.05	0.0005	ISO 14596	
	Antioxidant, %	0.08-0.4	0.25	IEC 60666	
2-Furfural and related compounds, mg/kg		non-corrosive	non-corrosive	IEC 61198	
Performance	Oxidation stability at 120°C		—	IEC 61125	
	Test Time (I):500h	Total acidity, mgKOH/g	≤ 0.3		0.05
		Sludge, %	≤ 0.05		0.03
		DDF at 90°C	≤ 0.050		0.030
Health, safety and environ	Flash point,PM, °C		≥ 135	ISO 2719	
	PCA, %		≤ 3	IP 346	
	PCB, mg/kg		not detectable	IEC 61619	
<p>Products meet IEC 60296-2020 standards</p> 					