

VOLTESSO

Mobil Industrial, Canada

Product Description

VOLTESSO™ brand insulating oils are formulated from high quality basestocks and select additives that provide excellent low temperature performance and resistance to oxidation and sludge formation in electrical service. These high quality electrical insulating oils are designed and manufactured to provide cooling and to help insulate transformer components against electrical corona and arching.

VOLTESSO 35 is recommended for use in power transformers, especially those subject to cold start-up, or have forced oil cooling, including associated load tap changers, switches and circuit breakers that operate at ambient temperatures below -25°C. Voltesso meets Canadian Standards Association C50-08 specifications for Class A, Type I oils.

Features and Benefits

Features	Advantages and Potential Benefits
Excellent low temperature fluidity	Improves circulation and heat transfer and allows operation at low temperatures in remote locations
Good insulating properties	Ability to withstand high levels of electrical field strength while helping to prevent corona discharge and arcing
Control of copper corrosion	Helps to prevent the formation of corrosive copper sulphides

Applications

- In oil filled electrical equipment where the transformer oil is used as an insulating medium including transformers, load tap changers, switches, circuit breakers, high voltage capacitors and lamp ballasts
 - In some EDM (electrical discharge machines) as a coolant and an insulator between the charged electrodes

Specifications and Approvals

This product meets:		35
Canadian Standards Association CSA C50-08, Class A, Type I		X

Properties and Specifications

Property	35
ASTM Color, ASTM D1500	
Aniline Point, °C, ASTM D611	63
Corrosive Sulfur, Procedure B, Rating, ASTM D1275	
Density @ 15 C, kg/l, ASTM D4052	0.876

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Property	35
Dielectric Breakdown, Impulse Conditions, 25 C, Needle Neg. to Sphere Grounded, 25.4 mm Gap, kV, ASTM D3300	145
Dielectric Breakdown, KV, 2.03 mm, kV, ASTM D1816	35
Flash Point, Cleveland Open Cup, °C, ASTM D92	145
Gassing Tendency, μl/min, ASTM D2300	30
Inhibitor, wt%, ASTM D2668	0.08
Interfacial Tension, 25 C, mN/m, ASTM D971	42
Kinematic Viscosity @ -40 C, mm2/s, ASTM D445	1800
Kinematic Viscosity @ 0 C, mm2/s, ASTM D445	42
Kinematic Viscosity @ 100 C, mm2/s, ASTM D445	2.1
Kinematic Viscosity @ 40 C, mm2/s, ASTM D445	7.6
Neutralization Number, mgKOH/g, ASTM D974	0.02
Oxidation Stability, Acid Number, 164 h, mgKOH/g, ASTM D2440	0.5
Oxidation Stability, Acid Number, 72 h, mgKOH/g, ASTM D2440	0.04
Oxidation Stability, Sludge, 164 h, %, ASTM D2440	0.2
Oxidation Stability, Sludge, 72 h, %, ASTM D2440	0.01
Polychlorinated Biphenyls, ppm, ASTM D4059	<1
Pour Point, °C, ASTM D97	-46
Power Factor, 60 Hz, 100 C, %, ASTM D924	0.5
Water, ppm, ASTM D1533	35

Health and Safety

Health and Safety recommendations for this product can be found on the Material Safety Data Sheet (MSDS) @ http://www.msds.exxonmobil.com/psims/psims.aspx

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Imperial Oil

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Typical Properties are typical of those obtained with normal production tolerance and do not constitute a specification. Variations that do not affect product performance are to be expected during normal manufacture and at different blending locations. The information contained herein is subject to change without notice. All products may not be available locally. For more information, contact your local Imperial Oil contact or visit www.imperialoil.ca

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