

# VoltCool VA-900<sup>®</sup> and VA-901<sup>®</sup>

## *BHT Antioxidant for Field Application in Transformers*

**VA-900 and VA-901 are concentrated antioxidant in liquid form for treatment of transformer fluids in the field.** Both are added directly to oil in de-energized transformers to raise the oil's antioxidant level which has depleted during regular use. VA-901 has a high flash point, for use with fire-resistant oils.

VoltCool Additives save time and money in transformer maintenance. When added at a 2% concentration, VA-900 or VA-901 will raise the antioxidant level to 0.30% by weight.

### **Key Features:**

- **Compatible with All Transformer Oils:** VoltCool Additives mix easily with transformer oils with no heating or lengthy circulation required.
- **Saves Time and Money:** Maintain transformer oil quickly, without extended outages and with minimal staff.
- **No New Materials or Chemicals:** VoltCool Additives use BHT (Butylated Hydroxy Toluene), the same antioxidant that's in transformers now.
- **High Dielectric Strength:** VoltCool Additives are highly processed and tested to ensure electrical safety.
- **Easy to Test and Detect:** Laboratories don't have to change their test methods.
- **No Sulfur. No Phosphates. No PFAS.** VoltCool Additives are safe for workers and the environment
- **User Safety:** Non-allergenic. Can be used without extensive personal protective equipment

**Composition:** VoltCool Additives are made from Engineered Fluid's proprietary process of microcrystallization and liquification of BHT (Butylated Hydroxy Toluene), which is then blended with highly processed dielectric fluids.

VoltCool additives are made at Engineered Fluids' ISO 9001-Certified manufacturing facilities in Tyler, Texas, from US sourced raw materials. They're made under the tightest manufacturing controls; characteristics are stringently tested and verified before shipment with a certificate of analysis available for all products.

**Application:** VoltCool Additives are designed specifically for direct application to de-energized electrical equipment, on-site with no premixing or extensive circulation required. Brief circulation of the fluid-antioxidant blend is recommended before re-energizing the equipment.

VoltCool Additives are added to transformer oil at a 2% additive rate. Therefore, 5 gallons of VA-900 will treat 250 gallons of transformer oil. 55 gallons of VA-900 will treat 2750 gallons of transformer oil. Transformer oil that has been properly treated will contain 0.30% BHT antioxidant after the two fluids have had time to mix.

VA-900 is made to be added to new or in-use petroleum, vegetable and synthetic hydrocarbon dielectric fluids with a Flash Point of 200C or less. VA-901 is made to be used with fire-resistant fluids and natural esters with a Flash Point of 200C or greater.

**Recycling, Recovery, Reprocessing and Disposal:** Engineered Fluids offers a full range of laboratory testing, maintenance, recycling, reprocessing and disposal services for all its products. Contact your Engineered Fluids representative for more information.

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### CHARACTERISTICS OF VOLTCOOL ADDITIVES

<i>Need more information? Please contact us at <a href="mailto:sales@engineeredfluids.com">sales@engineeredfluids.com</a> or +1.725.218.1980</i>	<b>VA-900</b>	<b>VA-901</b> <b>Manufactured in the United States</b>
<b>Application</b>	Antioxidant Additive for Transformer Oils or Dielectric Fluids	Antioxidant Additive for Fire Resistant Transformer Oils
<b>Composition</b>	BHT (butylated hydroxy toluene) liquified, processed and blended with a synthetic dielectric fluid	BHT (butylated hydroxy toluene) liquified, processed and blended with a Fire-Resistant dielectric fluid
<b>Appearance</b>	Clear amber liquid	Clear amber liquid
<b>Kinematic Viscosity, cSt @ 40C</b>	7.5	66
<b>Density @ 20 °C, g/cc</b>	0.83	0.83
<b>Dielectric Strength, kV</b>	50	50
<b>Dielectric Constant</b>	2.1	2.1
<b>Flash Point, °C</b>	190	295
<b>Pour Point, °C</b>	-65	-40
<b>Density, g/cc</b>	0.71	0.76
<b>Acid Value, mgKOH/g</b>	<0.10	<0.10
<b>Useful Temp Range, °C</b>	0 - 60	0 - 60
<b>Product Shelf Life (Sealed Original Container)</b>	1 Year	1 Year