A Comparison of how **Culbac® Hay Treatment** stacks up against **Propionic Acid**

	Culbac Hay Treatment®	Propionic Acid
Application	Only a few *ounces* of Culbac Hay Treatment (liquid or dry) are needed to treat a ton of forage. Culbac Hay Liquid should be applied at the rate of 2.6 fluid ounces per ton of hay. For Culbac Hay Dry, the rate is 6.4 ounces per ton of hay.	The application rates for propionic acids are measured in *pounds* per ton of forage. These vary anywhere from 2 to 20 pounds per ton of hay.
Corrosiveness	Culbac® Hay Treatments contain lactic acid and are only slightly corrosive. They do no cause excessive wear to sprayer hoses, nozzles and other equipment.	Propionic acid is very corrosive, leading to deterioration of parts and machinery after prolonged exposure.
Safety	Since Culbac® Hay Treatments can be an irritant if it comes into contact with sensitive tissue, gloves and protective eyewear are recommended when handling.	In addition to gloves and protective eyewear, good ventilation is recommended when working with propionic acid to avoid breathing vapors.
Efficacy	Side-by-side research studies[1] have proven that Culbac® Hay Treatment can inhibit mold and preserve forage quality in high-moisture hay as well as propionic acid.	Propionic acid can protect hay quality as well as Culbac® Hay Treatments—though only at MUCH higher inclusion rates.

And the winner is…Culbac® Hay Treatment! For high-moisture baling, Culbac® Hay Treatments are a safe, effective and economical alternative to propionic acid.

References: [1] For examples see: Ehle FR (1986) Influence of Moisture Level on Composition of Alfalfa Hay, University of Minnesota, Saint Paul, MN (H9), -- (1985) Propionic Acid or Culbac® Liquid for Higher Moisture Baled Grass Hay, Belvidere, NJ (H52), Davis L (1984) Field Demonstration Trial Work with Culbac® Hay Preservative, Beaver Dam, WI (H55).

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