



TENNESSEE DEPARTMENT OF AGRICULTURE

Ken Givens
Commissioner

REGULATORY SERVICES

Blending Stock / Suboctane Grade Terms

December 23, 2009

The following grade terms (See "NOTE" at the end of this document) and associated antiknock index (AKI) values have been approved by the Commissioner of the Tennessee Department of Agriculture pursuant to Rule 0080-5-12-.03 (2)(e):

1. **GRADE TERM:** UNLEADED SUBGRADE – CBOB*
ASSOCIATED AKI: MINIMUM AKI- 84.0
2. **GRADE TERM:** REGULAR SUBGRADE – CBOB*
ASSOCIATED AKI: MINIMUM AKI- 87.0 AFTER 10% ETHANOL
3. **GRADE TERM:** PREMIUM SUBGRADE – CBOB*
ASSOCIATED AKI: MINIMUM AKI- 91.0 (Or Greater As Certified) AFTER 10% ETHANOL

These terms and associated AKI values are approved with the following stipulations:

- a) The conveyor of a grade of fuel as designated above shall validate that after the proper addition of 10% by volume of Denatured Fuel Ethanol, meeting the most recent version of ASTM D4806, that the finished fuel blend will meet all the requirements of ASTM D4814 (with the exception of any variances granted by State of Tennessee Rule or Waivers) and result in a minimum AKI of 87.0 for Regular Grade and 91.0 (or greater as certified) for Premium Grade.
- b) These grades of fuel and the associated AKI values are approved only when being conveyed to a wholesaler. These grade terms and associated AKI values are not acceptable for retail sales as an end use fuel.
- c) For terms approved without an AKI value on the base blend stock: Should a federal agency having just jurisdiction interpret federal law or rule to require blending stock material to be accompanied with the respective automotive fuel rating certified upon transfer of such material, approval of these grade terms would be rescinded by the Department until an AKI is associated with the blending stock being described by such term.

* CBOB – Conventional Blend Stock for Oxygenate Blending

NOTE: Pursuant to Department of Agriculture Rule 0080-5-12-.03(2)(e) the following use of terminology is equivalent and can be used interchangeably in the grade terms listed above:

"Regular" and "Unleaded" are equivalent for describing fuels that will have a minimum of 87 AKI.

"Premium", "Super", "Supreme", "High Test", "Premier", "Ultra" and "Ultimate" are equivalent for describing fuels that will have a minimum AKI of 91 or greater.