

**192 PROOF GNS BEVERAGE ALCOHOL SPECIFICATION (CORN)**  
**(2011 Season)**

<b><u>Parameter</u></b>	<b><u>Limits</u></b>	<b><u>Method</u></b>
Ethanol, vol.% @ 20 Deg. C.	≥ 96.1	ASTM D 4052
Proof @ 15.56 Deg. C.	≥ 192	ASTM D 4052
Acidity, as acetic acid	≤ 12 ppm	ASTM D 1613
Acetaldehyde	≤ 5 ppm	ASTM D 5501
Methanol	≤ 5 ppm	ASTM D 5501
N-Propanol	≤ 5 ppm	ASTM D 5501
Higher Alcohols (Include I-Propanol, N-Propanol, I-Butanol, N-Butanol & I-Amyl)	≤ 5 ppm	ASTM D 5501
Esters (as Ethyl Acetate)	≤ 5 ppm	ASTM D 5501
Permanganate Test @ 15 Deg. C.	≥ 40 minutes	ASTM D 1363
Color	≤ 10 platinum cobalt	ASTM D 1209
Appearance	Clear, Bright	Visual
Odor	Free from foreign odors	ASTM D 1296
Hydrocarbons	Absent	ASTM D 1722
Benzene	Absent	UV
Toluene	Absent <sup>1</sup>	ASTM D 5501
Xylene	Absent <sup>1</sup>	ASTM D 5501
Cyclohexane	Absent <sup>1</sup>	ASTM D 5501
Sulfur	Absent <sup>1</sup>	ASTM D 3120
Inorganic Chlorides	Absent <sup>1</sup>	ASTM D 7328
Dry Extracts	≤ 1.5 mg/100 mL	ASTM D 1363
Alkalinity	Negative	ASTM D 1614
1,4 Dioxane	≤ 0.01 mg/L	GLC/MS

Note: <sup>1</sup> Below Detection Limit of 1 ppm