



# BROWN-FORMAN

August 19, 2014

## PRODUCT CERTIFICATE

**PRODUCT:** Jack Daniel's  
**CATEGORY:** Tennessee Whiskey  
**PRODUCT CODE:** PRD-00049/A0004233  
**PRODUCTION PLANT:** Jack Daniel's Distillery

Jack Daniel's Tennessee Whiskey is a product of the United States of America. It is manufactured in compliance with the laws and regulations governing the production and analysis of alcoholic beverages in the United States. Jack Daniel's Tennessee Whiskey contains no harmful ingredients and is fit for human consumption.

### NUTRITIONAL INFORMATION:

Parameter	Result
Alcohol, % by volume	40.0
Calories/100 mL	220
Carbohydrates/100 mL	0
Fat, g	0
Protein, g	0

### PRODUCT QUALITY PARAMETERS:

Parameter	Range
Alcohol, % by volume	39.8 – 40.2
Color (Absorbance @430)	0.6 – 0.8
Turbidity, NTU	< 1
Sensory	Conforms to Standard

### ANALYSES

Component	Units	Typical Batch Result
Alcohol	(% by volume, 20°C)	40.0
Aldehydes (expressed in acetaldehyde)	(g/100L AA)	8
Esters (expressed in ethyl acetate)	(g/100L AA)	60
Methanol	(g/100L AA)	18
n-Propanol (propan-1-ol)	(g/100L AA)	28
Isobutyl Alcohol (2-methylpropan-1-ol)	(g/100L AA)	156
Amyl Alcohols	(g/100L AA)	359
Total Higher Alcohols	(g/100L AA)	543

### SHELF LIFE AND STORAGE INFORMATION:

Product	Best Before (when stored under ideal conditions in unopened containers)	Storage Conditions
Jack Daniel's Tennessee Whiskey	5 years	Ideal Temperature: 50° - 85° F Relative Humidity: ≤ 70% Avoid prolonged storage (>2 weeks) at temperatures above or below ideal. Product out of case should <u>not</u> be stored in or near windows or directly below fluorescent lighting.