

W2 Grade Certified Ethanol Denaturant Specifications

Product Property	Test Method	Origin Test Results		Deliveries ^{1/}
		Minimum	Maximum	
Gravity, °API	D287	75.0	85.0	
Reid Vapor Pressure, psi	D5191	12	14	
Distillation,	D86			
90% Evaporated at Degree °F			365	
Final Boiling Point at Degree °F			437	
Color	D156	+25		
Benzene, vol %	D5580/ D3606		1.10	
Aromatics, vol %, max	D5580/ D1319		35.0	
Olefins Content, vol %, max	D6550/ D1319		10.0	
Doctor Sulfur, ppm	D4952 D5453/ D2622/ D7039	Negative	120	
Copper Corrosion	D130		1	
Haze Rating ^{2/}	D4176		2	3
NACE Corrosion	TM0172	B+		

Additives: W2 Grade shipments may not contain additives.

- 1/ Delivered products meets all applicable requirements at time and place of delivery.
- 2/ Compliance with ASTM D4176 will be determined using Procedure 2 at the following temperatures, adjusted seasonally:
- | | |
|----------------------------|-----------|
| February 16 – September 30 | 55 °F max |
| October 1 – February 15 | 45 °F max |

EPA Standards and Requirements: W2 Grade must meet the standards and requirements specified in 40 CFR 80.1611, except W2 Grade sulfur must be 120 ppm maximum.