

NR Grade 87.0 Regular Gasoline Blendstock (RBOB)

(For Blending With 10.0% Denatured Fuel Ethanol (92% Purity) As Defined In ASTM D4806 VOC-Controlled Region 1 Complex Model Phase II)

Product Property	Test Method	Origin		Deliveries ^{1/}					
		Minimum	Maximum	Class AA	Class A	Class B	Class C	Class D	Class E
Gravity, ° API ^{6/}	D287		Report						
Color			Undyed						
RVP ^{2/6/}	D5191								
Distillation	D86								
		<u>Class AA</u>	<u>Class A</u>	<u>Class B</u>	<u>Class C</u>	<u>Class D</u>	<u>Class E</u>		
10% Evaporated °F, max		158	158	149	140	131	122		
50% Evaporated °F, min		150	150	150	150	150	150		
50% Evaporated °F, max		250	250	245	240	235	230		
90% Evaporated °F, max		374	374	374	365	365	365		
Final Boiling Point °F, max		430	430	430	430	430	430		
Residue, vol% max		2	2	2	2	2	2		
E200 (vol%)	D86				30	70			
E300 (vol%)	D86				70	100			
Drivability Index, max	D4814								
		<u>Class AA</u>	<u>Class A</u>	<u>Class B</u>	<u>Class C</u>	<u>Class D</u>	<u>Class E</u>		
		1250	1250	1240	1230	1220	1200		
Vapor/Liquid Ratio = 20:1; °F min ^{2/}	D5188								
Emission Performance Reduction (%) ^{7/}					-27				
Mercaptan Sulfur, wt % ^{3/}	D3227					0.003			
Copper Corrosion	D130					1			
Silver Corrosion	D7667,7671					1			
Gum, Existent, mg/100 ml	D381					4	5		
Oxidation Stability, minutes	D525				240				
Octane									
RON	D2699					Report			
MON	D2700				82.0				
(R+M)/2					87.0				
Phosphorus, g/gal	D3231					0.003	0.005		
Benzene, vol %	D3606					1.3			
Aromatics (vol %)	D1319					50			
Olefins (vol %)	D1319					25			
Sulfur, ppm	D2622					80			
Oxygen Content wt % ^{6/}	D5599				1.5	4.0			
Oxygenates, (vol %) ^{8/}	D4815					0.05			
Haze Rating ^{6/}	D4176					2	3		
NACE Corrosion ^{6/}	TM0172, D7548				B+				
Odor ^{5/}					Nonoffensive				

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- 1/ Delivered products meets all applicable requirements at time and place of delivery.
- 2/ Refer to Seasonal Gasoline Volatility Schedule. Vapor pressure during VOC control will be reported on the blended fuel, outside of this period vapor pressure will be reported on the unblended fuel.
- 3/ Mercaptan Sulfur determination is waived if the result of the Doctor Test ASTM D4952 is negative.
- 4/ 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
- 5/ Any gasoline exhibiting an offensive odor and/or containing more than 0.30 wt % dicyclopentadiene will not be accepted for shipment.
- 6/ Specifications must be met before blending of denatured fuel ethanol
- 7/ For products blended to meet EPA or state imposed summer VOC requirements, test must be performed for RVP in accordance with procedure described in 40 CFR, PART 80, Appendix E, Method 3.
- 8/ Values below the detectible limit of an approved method may be reported as a zero value.

****NOTE: This RBOB may not be combined with any other RBOB except RBOB having the same requirement for oxygenate type and amount. "Base Gasoline" Not for sale to the ultimate consumer.**

****NOTE: Heavy metals are not allowed to be present.**