

AR Grade 93.0 Premium 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					
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						Report	
(R+M)/2		93.0						
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 %	D5599	1.5					4.0	
Oxygenates, (vol %) ^{6/}	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.**