

## VRM Grade 85.0 Regular RBOB Unleaded Gasoline Specifications

(This Reformulated Before Oxygenate Blending (RBOB) gasoline is intended for blending with 10% Denatured Fuel Ethanol (DFE) by volume)

Product Property	Method	Minimum	Maximum
Gravity, ° API	D287	Report	
Color		Undyed	
Volatility <sup>2/</sup>			
RVP <sup>6/8/</sup>	D5191		
Distillation <sup>9/</sup>	D86		
Benzene, vol % <sup>9/</sup>	D3606		4.9
Mercaptan Sulfur, wt % <sup>3/</sup>	D3227		0.003
Copper Corrosion	D130		1
Silver Corrosion	D7667,7671		1
Gum, Existent, mg/100 ml	D381		4
Oxidation Stability, minutes	D525	240	
Phosphorus, g/gal	D3231		0.003
Lead, g/gal	D3237		0.010
Octane <sup>9/</sup>			
RON	D2699	Report	
MON	D2700	Report	
(R+M)/2		85.0	
Sulfur, ppm <sup>8/</sup>	D2622		80
Oxygenates, vol $\%^{7/}$	D4815, 5599		0.05
Haze Rating <sup>4/</sup>	D4176		2
NACE Corrosion	TM0172, D7548	B+	
Odor <sup>5/</sup>		Nonoffensive	

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### Foot Notes:

- 1/ Delivered products meet all applicable requirements at time and place of delivery.
- 2/ Refer to Magellan's Seasonal Gasoline Volatility Classes and Schedule of Origin Volatility requirements.
- 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/ RVP limits on ethanol blended gasoline are controlled by various federal and state regulations and waivers, which are generally greater than the limits for base gasoline.
- 7/ Values below the detectible limit of an approved method may be reported as a zero value.
- 8/ Values will be reported on the 0 and 10 percent oxygenated gasoline.
- 9/ Value will be reported on the 10 percent oxygenate blend.

#### Notes:

- All parameters must be met without blending of denatured fuel ethanol unless noted.
- In accordance with 40 CFR 1090.1010(a) gasoline will be accepted when designated as E0 or E10 for oxygenate with ethanol as described by 40 CFR 1090.1110(c)2. In accordance with 40 CFR 1010(a) gasoline will be designated upon receipt as Winter RBOB, or Summer RBOB based on the RVP of the gasoline.
- All gasoline distributed will be designated as E10 as described by 40 CFR 1090.1110(c)(2).
- Product shall meet the Reformulated Gasoline (RFG) standard of 1090.220.
- Summer RBOB This product meets the requirements for summer reformulated or conventional gasoline.
- This product is non-additized gasoline.