

### Seasonal Gasoline Volatility Classes

(Shipments from Origin)

Reid Vapor Pressure, D5191<sup>1/</sup>

March 1 - September 15      DVPE using EPA formula<sup>2/</sup>  
 September 16 – February 28      DVPE using D5191 formula

Distillation, ASTM D 86 <sup>3/</sup>	Class AA	Class A	Class B	Class C	Class D	Class E
10% Evaporated °F, max	158	158	149	140	131	122
50% Evaporated °F, min <sup>4/</sup>	170	170	170	170	170	170
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 <sup>5/</sup>	430	430	430	430	430	430
Residue, vol % max	2	2	2	2	2	2
Driveability Index, D4814, max <sup>2/</sup>	1250	1250	1240	1230	1220	1200

#### Pre Ethanol Blend

Vapor to Liquid Ratio=20:1, °F <sup>3/6/</sup> D5188, min	<u>Class 1</u> 140	<u>Class 2</u> 133	<u>Class 3</u> 124	<u>Class 4</u> 116	<u>Class 5</u> 105
Vapor to Liquid Ratio=20:1, °F <sup>3/6/</sup> Area V only D5188, min	<u>Class 1</u> 140	<u>Class 2</u> 133	<u>Class 3</u> 124	<u>Class 4</u> 124	<u>Class 5</u> 108

#### Post Ethanol Blend

Vapor to Liquid Ratio=20:1, °F <sup>6/</sup> D5188, min	<u>Class 1</u> 129	<u>Class 2</u> 122	<u>Class 3</u> 116	<u>Class 4</u> 107	<u>Class 5</u> 102
Vapor to Liquid Ratio=20:1, °F <sup>6/</sup> Area V only D5188, min	<u>Class 1</u> 129	<u>Class 2</u> 122	<u>Class 3</u> 116	<u>Class 4</u> 116	<u>Class 5</u> 105

- 1/ All gasoline deliveries will not exceed applicable Federal and State requirements.
- 2/ The calculation required for the EPA compliance period is published in 40 CFR 80.46.
- 3/ Specifications must be met before blending with denatured fuel ethanol.
- 4/ Conventional Gasoline shall meet a minimum 50 % evaporated distillation temperature of 150 °F after blending of 9 % to 10 % by volume ethanol.
- 5/ The final boiling point of all gasoline deliveries at terminals will be at or below 437 °F as determined by ASTM D86
- 6/ D5188 is the referee test method. The alternative equations in D4814 may also be used.