



U. S. Oil & Refining Co.

3001 Marshall Avenue, Tacoma, Washington, 98421 (253) 383-1651

Product Specification Gasoline

<u>Properties</u>	<u>ASTM Method</u>	<u>Specifications</u>	
		<u>Min</u>	<u>Max</u>
Sulfur, ppmw.....	D 5453.....		80
Mercaptan, Doctor	D 4952.....		Negative ¹
Corrosion, Copper, 3h@50°C, class.	D 130.....		1B
Corrosion, Silver Strip, class	D 7671.....		1
Oxidation Stability, minutes.	D 525.....	240	
Lead Alkyl Content g/L (g/ US gal). .EPA ²			0.013 (0.05)
Gum Content, washed, mg/100 mL ..D 381.....			5

Product Octane Grades:

Antiknock Index, (R+M)/2	D 2699, D 2700
Premium grade	92.0
Mid-grade.....	89.0
Regular grade	87.0

This material may contain up to 10 volume % ethanol.

1) The doctor test "negative" requirement may be waived if the gasoline has a mercaptan sulfur content, D 3227, no greater than 20 ppmw and a merchantable odor.

2) EPA 40CFR80, App. B.



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Gasoline Product Specification

Seasonal Volatility Table

Property	ASTM Method	Nov.1 – Mar. 31		Apr. 1 – Apr. 30		May 1 – Sep. 15		Sep. 16 – Sep. 30		Oct. 1 – Oct. 31	
		Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
Volatility class	D4814, Table 4	E-5		D-4		A-3		C-3		D-4	
Distillation, °C (°F)	D 86										
10% Evap			50(122)		55(131)		70(158)		60(140)		55(131)
50% Evap		77(170) ³	110(230)	77(170) ³	113(235)	77(170)	121(250)	77(170)	116(240)	77(170) ³	113(235)
90% Evap			185(365)		185(365)		190(374)		185(365)		185(365)
End Point			225(437)		225(437)		225(437)		225(437)		225(437)
Residue, %			2		2		2		2		2
Vapor Pressure kPa (psi)	D 5191-01		103(15.0)		93(13.5)		62(9.0)		79(11.5)		93(13.5)

3) Conventional gasoline, not intended for blending with ethanol, 50% distillation minimum is 66°C(150°F) for distillation classes D&E.