

# Colonial Pipeline Company

## PRODUCT SPECIFICATIONS

3.34.1

### SPECIFICATIONS FOR FUNGIBLE FUEL OIL - 40 CETANE

Cancels Previous Issues of Grade 76

<u>PRODUCT PROPERTY</u>	<u>ASTM Test Method</u>	<u>Test Results</u>		<u>Note</u>
		<u>Minimum</u>	<u>Maximum</u>	
Gravity API	D287, D1298, D4052	30		
Flash Point, °F				
Pensky-Martin	D93	130		
Distillation, °F	D86			
50%			Report	
90%		540	640	
End Point			690	
Color ASTM	D1500,D6045		2.5	4
Color Visual		Dyed		3
Viscosity, cSt @ 40°C (104°F)	D445	1.9	3.4	
Pour Point	D97, D5949, D5950, D5985,			2
Cloud Point	D2500, D5771, D5772, D5773			2
Corrosion, 3 hrs. @ 50°C (122°F)	D130		1	
Total Sulfur, wt.%	D129, D1266, D1266, D2622, D4294		0.20	
Cetane Number	D613	40		5
Ash, wt.%	D482		0.01	
Carbon Residue: Ramsbottom on 10% Bottom	D524		0.35	
BS&W, vol.%	D2709 or equivalent		< 0.05	
Thermal stability, 90 minutes 150°C Pad rating, DuPont scale			7	
OR				
Oxidation stability, mg/100 ml	D2274		2.5	
Haze rating @ 25°C (77°F)	D4176 Procedure 2		2	
Nace Corrosion	TM0172-2001	B+ (Origin)		

April 2005

\* Denotes Change

# Colonial Pipeline Company

## PRODUCT SPECIFICATIONS

3.34.2

### SPECIFICATIONS FOR FUNGIBLE FUEL OIL - 40 CETANE

Cancels Previous Issues of Grade 76

#### NOTES:

1. Concentration and type of additives permitted only as approved by Colonial.

2. This schedule denotes the fluidity of the distillate at the time and place of origin.

Pour Point – August 1st through March 14th

Maximum: -18°C (0°F).

Pour Point – March 15th through July 31st

Maximum: -12°C (+10°F)

Cloud Point – August 1st through March 14th

Maximum: -9°C (+15°F)

Cloud Point – March 15th through July 31st

Maximum: -7°C (+20°F)

The referee method will be Pour point D97 and Cloud point D2500

3. Dye Requirement:

This product must exhibit visual evidence that red dye is present. The maximum allowable concentration, or spectral equivalence, is 0.75 pounds of Solid Red #26 per 1,000 barrels.

This product does not meet IRS excise tax requirements for dye.

4. ASTM color measurement before addition of dye.

5. Where cetane number by test method D613 is not available, test method D4737 can be used as an approximation.