

J.C. NOLAN PIPELINE

Diesel Fuel Specifications

**S15 MV No.2 Dsl Texas Low Emission Blendstock Containing up to 5%
Renewable Hydrotreated Diesel Fuel 6, 7**

<u>Product Property</u>	<u>ASTM Test Method</u>	<u>Specification</u>		<u>Note</u>
		<u>Minimum</u>	<u>Maximum</u>	
Gravity API at 60°F	D287,D1298,D4052	30.0		
Flash Point, °F	D93	130		
Distillation, °F				
50%	D86	Report		
90%	D86	540	640	
End Point	D86		690	
Color ASTM	D1500, D6045		2.5	
Color Visual		Undyed		
Viscosity @ 104°F, cSt	D445	1.9	4.1	
Pour Point, °F	D97,D5949,D5950,D5985		0 (Oct - Feb)	5
			10 (Mar - Sept)	
Cloud Point, °F	D2500D5771,D5772,D5773		15 (Oct - Feb)	5
			20 (Mar - Sept)	
Corrosion (Cu) 3 hrs @ 122°F	D130		1	
Total Sulfur, wt%(ppm)	EPA Qualified		0.0011 (11)	2
Cetane Number	D613,D4737A,D6890,D7170	40.0		3
EPA Aromatics, vol%	D1319		35.0	1,4
OR Cetane Index	D976	40.0		1,4
Ash, wt%	D482		0.01	
Carbon residue: Ramsbottom				
on 10% Bottom	D524		0.35	
BS&W, vol%	D2709		0.05	
Oxidation Stability, mg/100ml	D2274		2.5	
OR				
Thermal Stability, 90 minutes				
@ 150 C PAD Rating, Dupont Rating			7	
OR				
Thermal stability, % Reflectance	D6468			
Y/Green or		73		
W Unit		65		
Haze Rating @ 77 F	D4176 Procedure 2		2	
NACE Corrosion	TM0172	B+		
Conductivity, ps/m	D2624,D4308		250	

J.C. NOLAN PIPELINE

Diesel Fuel Specifications

S15 MV No.2 Dsl Texas Low Emission Blendstock Containing up to 5% Renewable Hydrotreated Diesel Fuel 6, 7

S15 MV No.2 Diesel Fuel. 15 ppm sulfur (maximum) Undyed Ultra-Low Sulfur Diesel Fuel For use in all diesel vehicles and engines.

This product does not comply with Title 30 Texas Administrative Code, §114.312 or §114.318 requirements for low emission diesel. For Texas shipments, the product transfer documents must contain the following statements: "This product may not be used as fuel for diesel engines in any Texas county requiring the use of low emission diesel fuel without further processing."

This fuel meets or exceeds all the requirements of ASTM D975 (Low Sulfur Grade No. 2-D S15 Diesel Fuel Oil), with the possible exception of the lubricity requirement in ASTM D975. If additional lubricity is needed, lubricity improver additive or further blending may be completed at downstream locations.

NOTES:

Concentration and type of additives permitted only as approved.

- (1) Use current EPA required method as published in 40 CFR Chapter 1, Part 80.46; test methods must be approved under 40 CFR §80.47.
- (2) EPA qualified methods per 40 CFR 80.585
- (3) ASTM D613 is the referee method. Where Cetane Number by ASTM D613 is not available, ASTM D4737 Procedure A can be used if the results are correlated to meet minimum 40 cetane number by D613.
- (4) Per EPA regulations 40 CFR Chapter 1, Part 80.29, the Cetane Index by D976 (40.0 min) or the Aromatics Content by D1319 (35.0 vol% max) requirement must be met.
- (5) Approximate dates only. Pipeline schedule should be used for specific shipping dates.
- (6) May contain up to 5% Renewable Diesel, as defined in note (8). The volume of Renewable Diesel must be disclosed on the COA (Certificate of Analysis).
- (7) JCNPL assumes no responsibility as a blender and all RIN's (Renewable Identification Number) must be separated before entering JCNPL's system.
- (8) Renewable diesel is a liquid fuel derived from 100% hydrotreated bio-mass feedstocks that meets the registration requirements for fuels and fuel additives established by the EPA under section 211 of the Clean Air Act and the requirements of ASTM D975. Renewable diesel containing fatty acid esters (FAME, FAEE, or other esters) is prohibited.