



# Pipeline Specifications



# **NuStar Logistics, L.P. Product Specifications**

## **Northern Mexico Supply (Nuevo Laredo)**

**SPECIFICATION FOR MEXICO GRADE ULTRA LOW SULFUR FUEL DIESEL**

**GRADE 88**

<u>Specification Points</u>	<u>ASTM Test Methods</u>	<u>Shipments (At Origin)</u>	
		<u>Minimum</u>	<u>Maximum</u>
Specific Gravity	D4052, D1298		Report
Color	D1500		2.5
Color visual			Undyed
Distillation,	D86, D7344, D7345		
Initial boiling temp, C			Report
10% Recovered, C			275
50% Recovered, C			Report
90% Recovered, C			345
Final Boiling temp, C			Report
Corrosion, Copper Strip @ 50 CD130			1
Cetane			
(1) Cetane Number	D613	45	
Or (2) Cetane Index, Procedure A	D4737	45	
Cetane Index <u>1</u> /	D976	45	
Flash, C	D93,D7094,D3828	45	
Carbon Residue on 10% Bottoms			
(Ramsbottom) - Percent D524			0.25
Cloud Point, C	D2500		Report
Pour Point, C	D97		0 (Mar to Oct)
Pour Point, C	D97		-5 (Nov to Feb)
Kinematic Viscosity, mm <sup>2</sup> /s @40 C	D445	1.9	4.1
Ash, % mass	D482		0.01
Sulfur (Zones ZMVM,ZMG,ZMM,ZFN)	D5453,D2622,D7039,D7220		15

Sulfur (Rest of country) ppm	D5453,D2622,7039,D7220	500
Aromatics (Volume %)	D1319, D5186	35
Water & Sediment, vol.%	D2709	0.05
Conductivity, pS/m @ 70 F	D2624, D4308	25
Lubricity, microns	D6079, D7688	520

1/ In the case the Cetane Number is measured, it shall be performed on the un-additized fuel.

<u>Zones:</u>	ZMVM	Mexico Valley Metropolitan Zone
	ZMG	Guadalajara Metropolitan Zone
	ZMM	Monterrey Metropolitan Zone
	ZFN	Northern Frontier Zone

Rev. 1

03/12/2019

**Revision Table**

Version No.	Date	Action(s)
1	August 30, 2019	Initial Issue