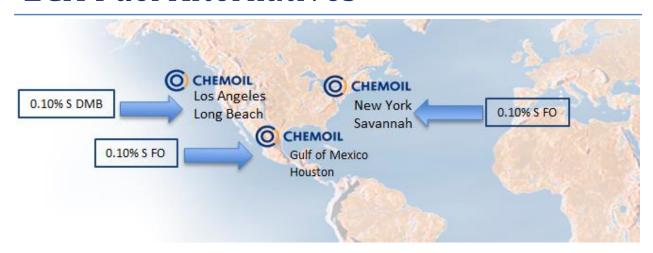


ECA Fuel Alternatives



Chemoil is pleased to announce our 2015 ECA Fuel Alternatives in select ports. Beginning in December we will begin supplying the alternative options in Los Angeles, Long Beach, Offshore Gulf of Mexico, Houston, New York and Savannah. In addition to the new alternative fuel options, the following ports will have 0.10% S MGO available in December: Los Angeles, Long Beach, New York, Charleston, Savannah, Jacksonville, Miami, Port Everglades, Houston, Gulf of Mexico, Panama and ARA.

New York/Savannah 0.10%S Fuel Oil - Typicals

Typical Fuel Specification	0.10% S FO
Gravity API	26.5
Density	0.896
Viscosity cSt	26.3
Sulphur weight %	<0.1%
TAN	2.35
Pour Point C	-6C
Flash F	>150F
MCR weight %	3.8
TSE weight %	0
TSP weight %	0
TSA weight %	0.01
CCAI	795
ASH weight %	0.06
Sodium ppm	1
Aluminum ppm	<5
Silicon ppm	<5
Vanadium ppm	<1
Calcium ppm	175
Zinc ppm	<1
Phosphorous ppm	<1
Compatibility	1
Appearance	Not clear and bright

0.10% S Fuel Oil Benefits

- 0.10% S Fuel Oil to comply with ECA S cap
- More cost effective than MGO
- Engine Manufacturer "no objection" statement
- Initial offering December
- Compatible with other 0.10% S products
- ISO 8217:2010 specification for RMG 380

Los Angeles/Long Beach 0.10% S DMB - Typicals

Fuel Specification	DMB
Viscosity	10.5
Density	0.885
MCR	0.1
Sulphur	0.085
Water	0.05
Pour Point	-4C
Flash	70
TSE	0.05
ASH	0.005
Cetane	40
Acid	0.1
Lubricity, Wear Scar	310
Hydrogen Sulfide	0.1
Appearance	Not clear and bright
Compatibility	1

0.10% S DMB Benefits

- 0.10% S DMB to comply with ECA S cap
- More cost effective than MGO
- Initial offering December 1
- Compatible with other 0.10% S products
- ISO 8217:2010 specification for DMB LS

Gulf Of Mexico/Houston 0.10%S Fuel Oil - Typicals

Fuel Specification	0.10% S FO
Gravity API	33.2
Density kg/m3@15C	0.858.9
Viscosity cSt@50C	16.84
Sulphur weight%	0.084
TAN	
Pour Point C	-20C
Flash F	174
MCR weight%	<0.10
TSE weight %	0.01
TSP weight %	
TSA weight %	0.01
CCAI	
ASH weight %	0.003
Sodium ppm	4
Aluminum ppm	<1
Silicon ppm	2
Vanadium ppm	<1
Calcium ppm	13
Zinc ppm	2
Phosphorous ppm	7
Compatibility	1
Appearance	Not clear and bright

0.10% S Fuel Oil Benefits

- 0.10% S Fuel Oil to comply with ECA S cap
- More cost effective than MGO
- Engine Manufacturer "no objection" statement
- Initial offering early December
- Houston (HOFTI) scheduled to come on line Dec. 20
- Compatible with other 0.10% S products
- ISO 8217:2010 specification for RMD 80 with max .1% S