CONSOLIDATED BIOFUELS Ltd.

Technicial Data Sheet

Marine D.E.F. (Diesel Exhaust Fluid)

Consolidated Biofuels Marine DEF (Diesel Exhaust Fluid) is a 40% Aqueous Urea Solution (AUS 40). It is manufactured with high purity urea mixed with quality deionized ultra pure water designed to meet the specifications of ISO 18611-1:2014 for NOx emissions of large diesel engines on ships.

Consolidated Biofuels DEF is produced to exceed the quality characteristics defined in ISO 18611-2. Typical results are within the stringent quality specifications outlined in ISO 18611-2 for DEF contaminates.

Features and Benefits

- Meets ISO 18611-1:2014
- Reduces harmful emissions

- Non-toxic, non hazardous and non flamable
- Increases fuel efficiency

Typical Results

Test	Units	Typical	Min	Max	Pass
Urea Content Density at 25C Refractive Index	% (m/m) Kg / L	40.1 1.1142	39.0 1.050	41.0 1.177	1
at 25C Alkalinity	-	1.3958	1.3934	1.3982	/
(as ammonia)	% (m/m)	<0.1	-	0.5	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
Biuret	% (m/m)	0.3	-	0.8	
Aldehydes	mg/kg	<0.6	-	100	-
Insoluble matter	mg/kg	8.3	-	50	-
Phosphates	mg/kg	0.04	-	1	
Calcium	mg/kg	<0.1	-	1	
Iron	mg/kg	<0.1		1	√ ,
Copper	mg/kg	<0.1		1	
Zinc	mg/kg	<0.1		1	
Chromium	mg/kg	<0.1	_	1	
Nickel	mg/kg	<0.1	-	1	
Aluminium	mg'kg	<0.1		1	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
Magnesium	mg/kg	<0.1	-	1	
Sodium	mg/kg	<0.2	_	1	
Potassium	mg/kg	<0.1	_	1	
Identity (FTIR)	-	Identical to reference		_	

Please note: these are typical performance indicators and can change without notice.