Marine DEF

Marine Grade Diesel Exhaust Fluid

Features & Benefits

- Meets ISO 18611-1:2014
- Non-toxic, non-polluting, non-hazardous and non-flammable
- IRVING MARINE DEF transforms harmful nitrogen oxide (NO_x) emissions from diesel powered marine vessels into harmless water vapor and nitrogen
- IRVING MARINE DEF operates as a reducing agent within the Selective Catalytic Reduction (SCR) in marine, rail, stationary or other applications with diesel engines.

IRVING MARINE DEF is a 40% Aqueous Urea Solution (AUS 40) a manufactured product with high purity urea mixed with demineralized quality water designed to meet the specifications of ISO 18611-1:2014 for NO_x emissions of large diesel engines on ships.

IRVING MARINE DEF is produced to exceed the quality characteristics defined in ISO 18611-1 Clause 5. Typical results of the contaminates analysed are far lower than the maximum set out by the ISO standard. Typical results are within the stringent quality specification outlined in ISO 22241-1:2006 for DEF contaminates.

Typical Results

Test	Units	Typical	Min	Max
Urea Content	% (*m/m*)	39.7	39.0	41.0
Density at 20°C	kg/L	1.1109	1.050	1.177
Refractive Index at 20°C	-	1.3948	1.3930	1.3982
Alkalinity (as Ammonia)	% (*m/m*)	<0.1	-	0.5
Biuret	% (*m/m*)	0.29	-	0.8
Aldehydes	mg/kg	<0.5	-	100
Insoluble matter	mg/kg	0.12	-	50
Phosphates	mg/kg	<0.05	-	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
Aluminum	mg/kg	<0.1	-	1
Magnesium	mg/kg	<0.1	-	1
Sodium	mg/kg	<0.1	-	1
Potassium	mg/kg	<0.1	-	1
Identity (FTIR)		Identical to reference	-	-

IRVING

Blending & Packaging

www.irvingblend.com
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Supporting data available to demonstrate appropriate performance.
Check with your Sales Representative for latest product approvals.
Please note, these are typical performance indicators and can change without notice.
This data sheet supersedes any previous version prior to 5/24/2018