

40% DEF Urea Solution



columbia
river
nitrogen llc

Marine Diesel Exhaust Fluid

Product Description –

Columbia River Nitrogen's 40% Diesel Exhaust Fluid is produced by combining pure liquid urea from the urea process and pure water from a reverse osmosis system and/or clean plant steam condensate. The resulting urea solution is high-purity and free of any chemical additives such as formaldehyde. Our DEF meets all ISO 18611 standards and undergoes regular quality testing by our in-house laboratory as well as an independent third-party laboratory.

Properties SDS#1135

	Min.	Max.
Urea Content (% wt.)	39	41
Density @ 20° C (lbs/gallon)	9.22	9.82
Refractive Index @ 68° F (20°C)	1.3947	1.3982
Alkalinity as NH ₃ , (% wt.)	n/a	0.5
Biuret, (% wt.)	n/a	0.8
Aldehydes, (mg/kg)	n/a	100
Insoluble Matter, (mg/kg)	n/a	50
Phosphate, (mg/kg)	n/a	1
Calcium, (mg/kg)	n/a	1
Iron, (mg/kg)	n/a	1
Magnesium, (mg/kg)	n/a	1
Sodium, (mg/kg)	n/a	1
Potassium, (mg/kg)	n/a	1

Applications & Uses

Diesel Exhaust Fluid is a high-quality urea solution that is needed for selective catalytic reduction (SCR) converters in diesel engines to reduce NO_x gas emissions. In marine applications, these SCR converters work well for reducing nitrogen oxide (NO_x) from boilers and internal combustion engines.

Storage & Handling

Recommended Storage Temperature: 40-77°F (4.5-25°C)

Salt-out Temperature: 32°F (0°C)

Allowing DEF to solidify is not recommended. Solidified DEF has a larger volume than liquid DEF, which could cause fully filled, closed containers to burst.

To avoid potential contamination that could affect SCR systems, ISO-18611 recommends not using copper, copper-containing alloys non-alloyed steels, and zinc-coated steels for container materials. For best practice recommendations and requirements for DEF storage, see ISO-18611 Part 3: Handling, transportation and storage.

For more information, see the safety data sheet.

Information regarding the contents and levels of metals in this product is available on the internet at <http://www.aapfco.org/metals.htm>
For detailed specifications, safety data sheets, or application guidance please contact us at: columbiarivernitrogen.com