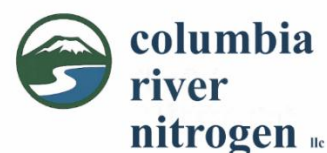


32.5% DEF Urea Solution



Diesel Exhaust Fluid

Product Description –

Columbia River Nitrogen's 32.5% 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 chemical additives such as formaldehyde. Our DEF meets all ISO 22241 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.)	31.8	33.2
Density @ 20° C (lbs/gallon)	9.07	9.12
Refractive Index @ 68° F (20°C)	1.3814	1.3843
Alkalinity as NH ₃ , (% wt.)	n/a	0.2
Biuret, (% wt.)	n/a	0.3
Aldehydes, (mg/kg)	n/a	5
Insoluble Matter, (mg/kg)	n/a	20
Phosphate, (mg/kg)	n/a	0.5
Calcium, (mg/kg)	n/a	0.5
Iron, (mg/kg)	n/a	0.5
Copper, (mg/kg)	n/a	0.2
Zinc, (mg/kg)	n/a	0.2
Chromium, (mg/kg)	n/a	0.2
Nickel, (mg/kg)	n/a	0.2
Aluminum, (mg/kg)	n/a	0.5
Magnesium, (mg/kg)	n/a	0.5
Sodium, (mg/kg)	n/a	0.5
Potassium, (mg/kg)	n/a	0.5

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.

Proper use of DEF can also help vehicles maintain fuel efficiency and performance.

Storage & Handling

Recommended Storage Temperature: 40-85°F (4.5-29.4°C)

Salt-out Temperature: 12°F (-11°C)

Allowing DEF to solidify is not recommended. Solidified DEF has approximately 7% larger volume than liquid DEF, which could cause fully filled, closed containers to burst.

To avoid potential contamination that could affect SCR systems, ISO 22241 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-22241 Part 3: Handling, transportation and storage.

For more information, see the safety data sheet.

For detailed specifications, safety data sheets, or application guidance please contact us at: columbiarivernitrogen.com