32.5% DEF Urea Solution

Diesel Exhaust Fluid

columbia river nitrogen llc

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 NH3, (% 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 NOx 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