



Blending & Packaging

Diesel Exhaust Fluid Testing

Turnkey solutions for all your DEF testing needs

We have been quality testing for nearly a century. That experience, along with our commitment to innovation, the environment and end-to-end laboratory solutions, makes Irving an industry leader in DEF testing and analysis.

SCR systems are common in engines worldwide. Impurities in DEF can cause downtime and even engine failure. DEF quality standards have been put in place to ensure that the SCR system has ISO 22241-1 certified DEF. We provide a full range of DEF testing and analysis with the ability to ensure your manufactured product meets industry standards.

Our DEF testing experts and world-class lab facilities give you the assurance you need about the quality and purity of your DEF.

What is the Irving difference?

- Well-equipped lab staffed by industry experts
- Testing protocols meets high ISO 22241-1 standards
- Fast turnaround and accurate results
- Ability to test all grades of DEF including off-road, marine and rail



Want to talk to a DEF testing expert?
We'd love to hear from you.

1.800.574.5823 • labservices@irvingoil.com



Blending & Packaging

Our Testing Capabilities

Irving DEF-AUS 32
– ISO 22241-1

Test	Method	Units
Urea Content (Nitrogen)	ISO 22241-2 Annex B	% by Weight
Urea Content (RI)	ISO 22241-2 Annex C	% by Weight
Density at 20°C	ASTM D4052-15	kg/L
Refractive Index at 20°C	ISO 22241-2 Annex C	-
Alkalinity as NH ₃	ISO 22241-2 Annex D	% by Weight
Biuret	ISO 22241-2 Annex E	% by Weight
Aldehydes	ISO 22241-2 Annex F	mg/kg
Insoluble Matter	ISO 22241-2 Annex G	mg/kg
Phosphate (PO ₄)	ISO 22241-2 Annex H	mg/kg
Calcium	ISO 22241-2 Annex I	mg/kg
Iron	ISO 22241-2 Annex I	mg/kg
Copper	ISO 22241-2 Annex I	mg/kg
Zinc	ISO 22241-2 Annex I	mg/kg
Chromium	ISO 22241-2 Annex I	mg/kg
Nickel	ISO 22241-2 Annex I	mg/kg
Aluminum	ISO 22241-2 Annex I	mg/kg
Magnesium	ISO 22241-2 Annex I	mg/kg
Sodium	ISO 22241-2 Annex I	mg/kg
Potassium	ISO 22241-2 Annex I	mg/kg
FTIR	ISO 22241-2 Annex J	-

Irving Blending & Packaging

555 Courtenay Causeway

PO Box 1160, Saint John, NB E2L 4E6

1.800.574.5823 • labservices@irvingoil.com