

Client:	DEF Products, LLC
Contact	Sharon Stegmuller
Address	422 East Barioni Blvd Imperial, CA 02251
Email	defproducts@gmail.com
Phone	760 355 7997
Report Date	5/14/2025

Enalytic ID	E2505020-001
TRAIN #	GBRX713519
TRC #	305072025M
T #	3,4,10
Sample ID	DEF 32.6%
Date Sampled	5/7/2025
Date Received	5/9/2025
ISO 17025	Certificate Number: L24-103

Certificate of Analysis

Diesel Exhaust Fluid Analytical ISO-22241

Client ID: 32.6% DEF TRAIN # GBRX713519 T # 3,4,10 TRC # 305072025M

Test Parameter/Method	Units	Test Method (ISO) ¹	Acceptable Limit ²	Results	Chemist	Analysis Date	Pass/Fail
Urea Content	wt%	22241-2 Annex C	31.8-33.2	32.4	SPT	5/9/2025	Pass
Refractive Index @ 20degC	N _D ²⁰	22241-2 Annex C	1.3814-1.3843	1.3827	CTM	5/9/2025	Pass
Alkalinity as NH ₃	%	22241-2 Annex D	<0.2	0.03	MFB	5/13/2025	Pass
Biuret	%	22241-2 Annex E	<0.3	0.14	CTM	5/9/2025	Pass
Aldehyde	mg/kg	22241-2 Annex F	<5.0	<1.0	SPT	5/9/2025	Pass
Insolubles	mg/kg	22241-2 Annex G	<20	<2.5	CTM	5/13/2025	Pass
Aluminum by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.15	BDK	5/9/2025	Pass
Calcium by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.15	BDK	5/9/2025	Pass
Chromium by ICP-OES	mg/kg	22241-2 Annex I	<0.2	<0.06	BDK	5/9/2025	Pass
Copper by ICP-OES	mg/kg	22241-2 Annex I	<0.2	<0.06	BDK	5/9/2025	Pass
Iron by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.15	BDK	5/9/2025	Pass
Magnesium by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.15	BDK	5/9/2025	Pass
Nickel by ICP-OES	mg/kg	22241-2 Annex I	<0.2	<0.06	BDK	5/9/2025	Pass
Phosphate by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.46	BDK	5/9/2025	Pass
Potassium by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.15	BDK	5/9/2025	Pass
Sodium by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.15	BDK	5/9/2025	Pass
Zinc by ICP-OES	mg/kg	22241-2 Annex I	<0.2	<0.06	BDK	5/9/2025	Pass

Miscellaneous Secondary Unregulated Quality Standards

Identify by FTIR (attached) ³	Spectra	22241-2 Annex J	Control Match	---	---	---	---
Density @ 20degC	g/cm ³	3675	Not Applicable	1.0903	CTM	5/9/2025	---

Note 1: All ISO standards are up to date with the latest revisions.

Note 2: The acceptable values are based on the standard 32.5% unless otherwise stated, and are less than or equal to the values shown.

Note 3: ISO 17025 accreditation not applied for.

All procedures were conducted in accordance with Enalytic's Quality Control manual in its most current form and/or related procedures. The information contained in the analytical report represents only the materials tested and may not be reproduced except in full and without the written approval of the Technical Director of Enalytic Labs. Enalytic maintains a quality system in compliance with ISO17025:2017 with accreditations through Perry Johnson certificate #L24-103. All testing will be conducted in good faith by trained personnel equipped with the proper equipment and methodologies. Our liability will be limited to the cost of the services, including third-party charges. All test samples will be retained for a minimum of 3 months and/or extension by request. Fraudulent, false or statements of fiction are punishable by Federal Law. All samples received and reported above have been received in proper condition or as noted on the report.

Certification Approval _____

Laboratory Director: Anthony J Scala

Date: 5/14/2025

Client:	DEF Products, LLC
Contact	Sharon Stegmuller
Address	422 East Barioni Blvd Imperial, CA 02251
Email	defproducts@gmail.com
Phone	760 355 7997
Report Date	5/14/2025

Enalytic ID	E2505023-001
TRAIN #	GATX235055
TRC #	305082025T
T #	1&2
Sample ID	DEF 32.5%
Date Sampled	5/8/2025
Date Received	5/12/2025
ISO 17025	Certificate Number: L24-103

Certificate of Analysis

Diesel Exhaust Fluid Analytical ISO-22241

Client ID: 32.5% DEF TRAIN # GATX235055 T # 1&2 TRC # 305082025T

Test Parameter/Method	Units	Test Method (ISO) ¹	Acceptable Limit ²	Results	Chemist	Analysis Date	Pass/Fail
Urea Content	wt%	22241-2 Annex C	31.8-33.2	32.3	SPT	5/14/2025	Pass
Refractive Index @ 20degC	N _D ²⁰	22241-2 Annex C	1.3814-1.3843	1.3826	CTM	5/14/2025	Pass
Alkalinity as NH ₃	%	22241-2 Annex D	<0.2	0.03	MFB	5/13/2025	Pass
Biuret	%	22241-2 Annex E	<0.3	0.15	CTM	5/13/2025	Pass
Aldehyde	mg/kg	22241-2 Annex F	<5.0	<1.0	MFB	5/12/2025	Pass
Insolubles	mg/kg	22241-2 Annex G	<20	<2.5	CTM	5/13/2025	Pass
Aluminum by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.15	BDK	5/12/2025	Pass
Calcium by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.15	BDK	5/12/2025	Pass
Chromium by ICP-OES	mg/kg	22241-2 Annex I	<0.2	<0.06	BDK	5/12/2025	Pass
Copper by ICP-OES	mg/kg	22241-2 Annex I	<0.2	<0.06	BDK	5/12/2025	Pass
Iron by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.15	BDK	5/12/2025	Pass
Magnesium by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.15	BDK	5/12/2025	Pass
Nickel by ICP-OES	mg/kg	22241-2 Annex I	<0.2	<0.06	BDK	5/12/2025	Pass
Phosphate by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.46	BDK	5/12/2025	Pass
Potassium by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.15	BDK	5/12/2025	Pass
Sodium by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.15	BDK	5/12/2025	Pass
Zinc by ICP-OES	mg/kg	22241-2 Annex I	<0.2	<0.06	BDK	5/12/2025	Pass

Miscellaneous Secondary Unregulated Quality Standards

Identify by FTIR (attached) ³	Spectra	22241-2 Annex J	Control Match	---	---	---	---
Density @ 20degC	g/cm ³	3675	Not Applicable	1.0893	MFB	5/12/2025	---

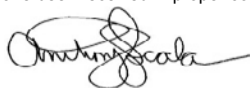
Note 1: All ISO standards are up to date with the latest revisions.

Note 2: The acceptable values are based on the standard 32.5% unless otherwise stated, and are less than or equal to the values shown.

Note 3: ISO 17025 accreditation not applied for.

All procedures were conducted in accordance with Enalytic's Quality Control manual in its most current form and/or related procedures. The information contained in the analytical report represents only the materials tested and may not be reproduced except in full and without the written approval of the Technical Director of Enalytic Labs. Enalytic maintains a quality system in compliance with ISO17025:2017 with accreditations through Perry Johnson certificate #L24-103. All testing will be conducted in good faith by trained personnel equipped with the proper equipment and methodologies. Our liability will be limited to the cost of the services, including third-party charges. All test samples will be retained for a minimum of 3 months and/or extension by request. Fraudulent, false or statements of fiction are punishable by Federal Law. All samples received and reported above have been received in proper condition or as noted on the report.

Certification Approval



Laboratory Director: Anthony J Scala

Date: 5/14/2025

Client:	DEF Products, LLC
Contact	Sharon Stegmuller
Address	422 East Barioni Blvd Imperial, CA 02251
Email	defproducts@gmail.com
Phone	760 355 7997
Report Date	6/2/2025

Enalytic ID	E2505054-001
TRAIN #	GATX220478
TRC #	305272025P
T #	3&4
Sample ID	DEF 32.3%
Date Sampled	5/27/2025
Date Received	5/29/2025
ISO 17025	Certificate Number: L24-103

Certificate of Analysis

Diesel Exhaust Fluid Analytical ISO-22241

Client ID: 32.3% DEF TRAIN # GATX220478 T # 3&4 TRC # 305272025P

Test Parameter/Method	Units	Test Method (ISO) ¹	Acceptable Limit ^{2,4}	Results	Chemist	Analysis Date	Pass/Fail
Urea Content	wt%	22241-2 Annex C	31.8-33.2	32.0	SPT	6/2/2025	Pass
Refractive Index @ 20degC	N _D ²⁰	22241-2 Annex C	(1.3811-1.3846)	1.3812	CTM	6/2/2025	Pass
Alkalinity as NH ₃	%	22241-2 Annex D	<0.2	0.09	MFB	6/2/2025	Pass
Biuret	%	22241-2 Annex E	<0.3	0.15	CTM	6/2/2025	Pass
Aldehyde	mg/kg	22241-2 Annex F	<5.0	<1.0	MFB	6/2/2025	Pass
Insolubles	mg/kg	22241-2 Annex G	<20	<2.5	CTM	5/29/2025	Pass
Aluminum by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.15	BDK	5/29/2025	Pass
Calcium by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.15	BDK	5/29/2025	Pass
Chromium by ICP-OES	mg/kg	22241-2 Annex I	<0.2	<0.06	BDK	5/29/2025	Pass
Copper by ICP-OES	mg/kg	22241-2 Annex I	<0.2	<0.06	BDK	5/29/2025	Pass
Iron by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.15	BDK	5/29/2025	Pass
Magnesium by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.15	BDK	5/29/2025	Pass
Nickel by ICP-OES	mg/kg	22241-2 Annex I	<0.2	<0.06	BDK	5/29/2025	Pass
Phosphate by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.46	BDK	5/29/2025	Pass
Potassium by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.15	BDK	5/29/2025	Pass
Sodium by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.15	BDK	5/29/2025	Pass
Zinc by ICP-OES	mg/kg	22241-2 Annex I	<0.2	<0.06	BDK	5/29/2025	Pass

Miscellaneous Secondary Unregulated Quality Standards

Identify by FTIR (attached) ³	Spectra	22241-2 Annex J	Control Match	---	---	---	---
Density @ 20degC	g/cm ³	3675	Not Applicable	1.0886	CTM	5/29/2025	---

Note 1: All ISO standards are up to date with the latest revisions.

Note 2: The acceptable values are based on the standard 32.5% unless otherwise stated, and are less than or equal to the values shown.

Note 3: ISO 17025 accreditation not applied for.

Note 4: The ISO 22241-2 acceptable limit plus reproducibility for Refractive Index is shown in parentheses and is within the set of limits shown.

All procedures were conducted in accordance with Enalytic's Quality Control manual in its most current form and/or related procedures. The information contained in the analytical report represents only the materials tested and may not be reproduced except in full and without the written approval of the Technical Director of Enalytic Labs. Enalytic maintains a quality system in compliance with ISO17025:2017 with accreditations through Perry Johnson certificate #L24-103. All testing will be conducted in good faith by trained personnel equipped with the proper equipment and methodologies. Our liability will be limited to the cost of the services, including third-party charges. All test samples will be retained for a minimum of 3 months and/or extension by request. Fraudulent, false or statements of fiction are punishable by Federal Law. All samples received and reported above have been received in proper condition or as noted on the report.

Certification Approval _____

Laboratory Director: Anthony J Scala

Date: 6/2/2025