

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	11/13/2023

Enalytic ID	E2311024-001
TANK	4 & 5
Batch Number	311082023L
Train	UTLX647710
Sample ID	DEF 32.6%
Date Sampled	11/8/2023
Date Received	11/9/2023
ISO 17025	Certificate Number: AT-2956

Certificate of Analysis

Diesel Exhaust Fluid Analytical ISO-22241

Client ID: 32.6% DEF TANK 4 & 5 Batch # 311082023L Train # UTLX647710

Test Parameter/Method	Units	Test Method (ISO) ¹	Acceptable Limit ²	Results ⁴	Chemist	Analysis Date	Pass/Fail
Urea Content	wt%	22241-2 Annex C	31.8-33.2	32.0	SPT	11/13/2023	Pass
Refractive Index @ 20degC	N _D ²⁰	22241-2 Annex C	1.3814-1.3843	1.3822	MFB	11/13/2023	Pass
Alkalinity as NH ₃	%	22241-2 Annex D	<0.2	0.10	MDC	11/13/2023	Pass
Biuret	%	22241-2 Annex E	<0.3	0.16	MDC	11/10/2023	Pass
Aldehyde	mg/kg	22241-2 Annex F	<5.0	<1.0	MFB	11/10/2023	Pass
Insolubles	mg/kg	22241-2 Annex G	<20	<2.5	MFB	11/9/2023	Pass
Aluminum by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.05	SPT	11/9/2023	Pass
Calcium by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.05	SPT	11/9/2023	Pass
Chromium by ICP-OES	mg/kg	22241-2 Annex I	<0.2	0.084	SPT	11/9/2023	Pass
Copper by ICP-OES	mg/kg	22241-2 Annex I	<0.2	<0.02	SPT	11/9/2023	Pass
Iron by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.05	SPT	11/9/2023	Pass
Magnesium by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.05	SPT	11/9/2023	Pass
Nickel by ICP-OES	mg/kg	22241-2 Annex I	<0.2	<0.02	SPT	11/9/2023	Pass
Phosphate by ICP-OES	mg/kg	22241-2 Annex I	<0.5	0.42	SPT	11/9/2023	Pass
Potassium by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.05	SPT	11/9/2023	Pass
Sodium by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.05	SPT	11/9/2023	Pass
Zinc by ICP-OES	mg/kg	22241-2 Annex I	<0.2	<0.02	SPT	11/9/2023	Pass

Miscellaneous Secondary Unregulated Quality Standards

Identify by FTIR (attached) ³	Spectra	22241-2 Annex J	Control Match	Match	MDC	11/10/2023	---
Density @ 20degC	g/cm ³	3675	Not Applicable	1.0898	MFB	11/10/2023	---

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: We will be rewriting the QC specifications for our Refractometer shortly to conform with our updated Quality Systems.

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 ANAB certificate #AT-2956. 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 extended on 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: 11/13/2023

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	11/22/2023

Enalytic ID	E2311042-001
FROM TANK #	13 309132023M
Batch Number	311152023M
TO TANK #	5 & 4
Sample ID	DEF 32.5%
Date Sampled	11/15/2023
Date Received	11/16/2023
ISO 17025	Certificate Number: AT-2956

Certificate of Analysis

Diesel Exhaust Fluid Analytical ISO-22241

Client ID: 32.5% DEF FROM TANK # 13 309132023M Batch # 311152023M TO TANK # 5 & 4

Test Parameter/Method	Units	Test Method (ISO) ¹	Acceptable Limit ²	Results ⁴	Chemist	Analysis Date	Pass/Fail
Urea Content	wt%	22241-2 Annex C	31.8-33.2	32.7	SPT	11/22/2023	Pass
Refractive Index @ 20degC	N _D ²⁰	22241-2 Annex C	1.3814-1.3843	1.3832	MDC	11/20/2023	Pass
Alkalinity as NH ₃	%	22241-2 Annex D	<0.2	0.08	MFB	11/17/2023	Pass
Biuret	%	22241-2 Annex E	<0.3	0.16	MDC	11/17/2023	Pass
Aldehyde	mg/kg	22241-2 Annex F	<5.0	<1.0	MFB	11/20/2023	Pass
Insolubles	mg/kg	22241-2 Annex G	<20	<2.5	MFB	11/16/2023	Pass
Aluminum by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.10	SPT	11/27/2023	Pass
Calcium by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.10	SPT	11/27/2023	Pass
Chromium by ICP-OES	mg/kg	22241-2 Annex I	<0.2	<0.04	SPT	11/27/2023	Pass
Copper by ICP-OES	mg/kg	22241-2 Annex I	<0.2	<0.04	SPT	11/27/2023	Pass
Iron by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.10	SPT	11/27/2023	Pass
Magnesium by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.10	SPT	11/27/2023	Pass
Nickel by ICP-OES	mg/kg	22241-2 Annex I	<0.2	<0.04	SPT	11/27/2023	Pass
Phosphate by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.31	SPT	11/27/2023	Pass
Potassium by ICP-OES	mg/kg	22241-2 Annex I	<0.5	0.13	SPT	11/27/2023	Pass
Sodium by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.10	SPT	11/27/2023	Pass
Zinc by ICP-OES	mg/kg	22241-2 Annex I	<0.2	<0.04	SPT	11/27/2023	Pass
Miscellaneous Secondary Unregulated Quality Standards							
Identify by FTIR (attached) ³	Spectra	22241-2 Annex J	Control Match	Match	MDC	11/20/2023	---
Density @ 20degC	g/cm ³	3675	Not Applicable	1.0908	MDC	11/20/2023	---

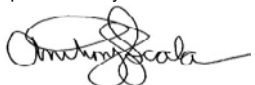
Note 1: All ISO standards are up to date with the latest revisions.

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: Report was Amended to correct the Metals Results and Analyses Dates.

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Certification Approval 
Laboratory Director: Anthony J Scala

Date: 11/28/2023

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	11/30/2023

Enalytic ID	E2311064-001
TANK #	1 & 2
Batch Number	311242023L
Train	TILX264903
Date Sampled	11/24/2023
Date Received	11/28/2023
ISO 17025	Certificate Number: AT-2956

Certificate of Analysis

Diesel Exhaust Fluid Analytical ISO-22241

Client ID: 32.7% DEF TANK # 1 & 2 Batch # 311242023L Train # TILX264903

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	32.5	SPT	11/30/2023	Pass
Refractive Index @ 20degC	N _D ²⁰	22241-2 Annex C	1.3814-1.3843	1.3830	CAR	11/29/2023	Pass
Alkalinity as NH ₃	%	22241-2 Annex D	<0.2	0.07	MDC	11/29/2023	Pass
Biuret	%	22241-2 Annex E	<0.3	0.16	MDC	11/30/2023	Pass
Aldehyde	mg/kg	22241-2 Annex F	<5.0	<1.0	MDC	11/30/2023	Pass
Insolubles	mg/kg	22241-2 Annex G	<20	<2.5	SPT	11/29/2023	Pass
Aluminum by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.10	SPT	11/28/2023	Pass
Calcium by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.10	SPT	11/28/2023	Pass
Chromium by ICP-OES	mg/kg	22241-2 Annex I	<0.2	0.046	SPT	11/28/2023	Pass
Copper by ICP-OES	mg/kg	22241-2 Annex I	<0.2	<0.04	SPT	11/28/2023	Pass
Iron by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.10	SPT	11/28/2023	Pass
Magnesium by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.10	SPT	11/28/2023	Pass
Nickel by ICP-OES	mg/kg	22241-2 Annex I	<0.2	<0.04	SPT	11/28/2023	Pass
Phosphate by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.31	SPT	11/28/2023	Pass
Potassium by ICP-OES	mg/kg	22241-2 Annex I	<0.5	0.24	SPT	11/28/2023	Pass
Sodium by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.10	SPT	11/28/2023	Pass
Zinc by ICP-OES	mg/kg	22241-2 Annex I	<0.2	<0.04	SPT	11/28/2023	Pass

Miscellaneous Secondary Unregulated Quality Standards

Identify by FTIR (attached) ³	Spectra	22241-2 Annex J	Control Match	Match	CAR	11/30/2023	---
Density @ 20degC	g/cm ³	3675	Not Applicable	1.0913	MDC	11/29/2023	---

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Certification Approval 

Laboratory Director: Anthony J Scala

Date: 11/30/2023