

6034 Corporate Dr. East Syracuse NY 13057 Web Site: Enalytic.com Ph:315-437-0255

PJLA Testing ISO/IEC 17025:2017

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 3/11/2024

Enalytic ID	E2403014-001
Train #	GBRX716277
Batch Number	303062024P
TANKS#	4&5
Sample ID	DEF 32.3%
Date Sampled	3/6/2024
Date Received	3/7/2024
ISO 17025	Certificate Number: L24-103

## Certificate of Analysis

Diesel Exhaust Fluid Analytical ISO-22241

Client ID: 32.3% DEF Train # GBRX716277 Batch # 303062024P TANKS # 4&5

Test Parameter/Method	Units	Test	Acceptable	Results	Chemist	Analysis	Pass/
		Method (ISO) <sup>1</sup>	Limit <sup>2</sup>			Date	Fail
Urea Content	wt%	22241-2 Annex C	31.8-33.2	32.3	SPT	3/11/2024	Pass
Refractive Index @ 20degC	$N_D^{20}$	22241-2 Annex C	1.3814-1.3843	1.3826	MDC	3/8/2024	Pass
Alkalinity as NH <sub>3</sub>	%	22241-2 Annex D	<0.2	0.07	MFB	3/7/2024	Pass
Biuret	%	22241-2 Annex E	<0.3	0.17	MDC	3/7/2024	Pass
Aldehyde	mg/kg	22241-2 Annex F	<5.0	<1.0	MFB	3/8/2024	Pass
Insolubles	mg/kg	22241-2 Annex G	<20	<2.5	MFB	3/7/2024	Pass
Aluminum by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.10	BDK	3/7/2024	Pass
Calcium by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.10	BDK	3/7/2024	Pass
Chromium by ICP-OES	mg/kg	22241-2 Annex I	<0.2	<0.04	BDK	3/7/2024	Pass
Copper by ICP-OES	mg/kg	22241-2 Annex I	<0.2	0.080	BDK	3/7/2024	Pass
Iron by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.10	BDK	3/7/2024	Pass
Magnesium by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.10	BDK	3/7/2024	Pass
Nickel by ICP-OES	mg/kg	22241-2 Annex I	<0.2	<0.04	BDK	3/7/2024	Pass
Phosphate by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.31	BDK	3/7/2024	Pass
Potassium by ICP-OES	mg/kg	22241-2 Annex I	<0.5	0.18	BDK	3/7/2024	Pass
Sodium by ICP-OES	mg/kg	22241-2 Annex I	<0.5	0.12	BDK	3/7/2024	Pass
Zinc by ICP-OES	mg/kg	22241-2 Annex I	<0.2	<0.04	BDK	3/7/2024	Pass
Miscellaneous Secondary Unregulated Quality Standards							
Identify by FTIR (attached) <sup>3</sup>	Spectra	22241-2 Annex J	Control Match	Match	MDC	3/8/2024	
Density @ 20degC	g/cm <sup>3</sup>	3675	Not Applicable	1.0918	MFB	3/8/2024	

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 #124-103. 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	$\sim$	7

Laboratory Director: Anthony J Scala

Enalytic DUNS Reg. Number: 02-636-0096

Page 1 of 1

3/11/2024

Date:



Report Date 3/19/2024

6034 Corporate Dr. East Syracuse NY 13057 Web Site: Enalytic.com Ph:315-437-0255

PJLA Testing ISO/IEC 17025:2017

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

 Enalytic ID
 E2403043-001

 To TANK #
 1

 Batch Number
 303014202L

 Sample ID
 DEF 32.5%

 Date Sampled
 3/14/2024

 Date Received
 3/15/2024

 ISO 17025
 Certificate Number: L24-103

# Certificate of Analysis

Diesel Exhaust Fluid Analytical ISO-22241

Client ID: 32.5% DEF To TANK #1 Batch # 303014202L

Test Parameter/Method	Units	Test	Acceptable	Results	Chemist	Analysis	Pass/
		Method (ISO) <sup>1</sup>	Limit <sup>2</sup>			Date	Fail
Urea Content	wt%	22241-2 Annex C	31.8-33.2	32.7	SPT	3/19/2024	Pass
Refractive Index @ 20degC	$N_D^{20}$	22241-2 Annex C	1.3814-1.3843	1.3833	MDC	3/18/2024	Pass
Alkalinity as NH <sub>3</sub>	%	22241-2 Annex D	<0.2	0.06	MDC	3/15/2024	Pass
Biuret	%	22241-2 Annex E	<0.3	0.13	MDC	3/19/2024	Pass
Aldehyde	mg/kg	22241-2 Annex F	<5.0	<1.0	MFB	3/15/2024	Pass
Insolubles	mg/kg	22241-2 Annex G	<20	<2.5	MFB	3/18/2024	Pass
Aluminum by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.16	BDK	3/18/2024	Pass
Calcium by ICP-OES	mg/kg	22241-2 Annex I	<0.5	0.40	BDK	3/18/2024	Pass
Chromium by ICP-OES	mg/kg	22241-2 Annex I	<0.2	<0.06	BDK	3/18/2024	Pass
Copper by ICP-OES	mg/kg	22241-2 Annex I	<0.2	<0.06	BDK	3/18/2024	Pass
Iron by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.16	BDK	3/18/2024	Pass
Magnesium by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.16	BDK	3/18/2024	Pass
Nickel by ICP-OES	mg/kg	22241-2 Annex I	<0.2	<0.06	BDK	3/18/2024	Pass
Phosphate by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.5	BDK	3/18/2024	Pass
Potassium by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.16	BDK	3/18/2024	Pass
Sodium by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.16	BDK	3/18/2024	Pass
Zinc by ICP-OES	mg/kg	22241-2 Annex I	<0.2	<0.06	BDK	3/18/2024	Pass
Miscellaneous Secondary Unregulated Quality Standards							
Identify by FTIR (attached) <sup>3</sup>	Spectra	22241-2 Annex J	Control Match	Match	MDC	3/19/2024	
Density @ 20degC	g/cm <sup>3</sup>	3675	Not Applicable	1.0938	MFB	3/18/2024	

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.

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Laboratory Director: Anthony J Scala

Date: 3/19/2024

Enalytic DUNS Reg. Number: 02-636-0096



Report Date 3/19/2024

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PJLA Testing ISO/IEC 17025:2017

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

### Certificate of Analysis

Diesel Exhaust Fluid Analytical ISO-22241

Client ID: 32.5% DEF From TANK # 12 To # 2 Batch # 303142024P

Test Parameter/Method	Units	Test	Acceptable	Results	Chemist	Analysis	Pass/
		Method (ISO) <sup>1</sup>	Limit <sup>2</sup>			Date	Fail
Urea Content	wt%	22241-2 Annex C	31.8-33.2	32.4	SPT	3/19/2024	Pass
Refractive Index @ 20degC	$N_D^{20}$	22241-2 Annex C	1.3814-1.3843	1.3829	MDC	3/18/2024	Pass
Alkalinity as NH <sub>3</sub>	%	22241-2 Annex D	<0.2	0.07	MDC	3/15/2024	Pass
Biuret	%	22241-2 Annex E	<0.3	0.18	MDC	3/19/2024	Pass
Aldehyde	mg/kg	22241-2 Annex F	<5.0	<1.0	MFB	3/15/2024	Pass
Insolubles	mg/kg	22241-2 Annex G	<20	<2.5	MFB	3/18/2024	Pass
Aluminum by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.16	BDK	3/18/2024	Pass
Calcium by ICP-OES	mg/kg	22241-2 Annex I	<0.5	0.26	BDK	3/18/2024	Pass
Chromium by ICP-OES	mg/kg	22241-2 Annex I	<0.2	<0.06	BDK	3/18/2024	Pass
Copper by ICP-OES	mg/kg	22241-2 Annex I	<0.2	<0.06	BDK	3/18/2024	Pass
Iron by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.16	BDK	3/18/2024	Pass
Magnesium by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.16	BDK	3/18/2024	Pass
Nickel by ICP-OES	mg/kg	22241-2 Annex I	<0.2	<0.06	BDK	3/18/2024	Pass
Phosphate by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.5	BDK	3/18/2024	Pass
Potassium by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.16	BDK	3/18/2024	Pass
Sodium by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.16	BDK	3/18/2024	Pass
Zinc by ICP-OES	mg/kg	22241-2 Annex I	<0.2	<0.06	BDK	3/18/2024	Pass
Miscellaneous Secondary Unregulated Quality Standards							
Identify by FTIR (attached) <sup>3</sup>	Spectra	22241-2 Annex J	Control Match	Match	MDC	3/19/2024	
Density @ 20degC	g/cm <sup>3</sup>	3675	Not Applicable	1.0923	MFB	3/18/2024	

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Certification Approval		Date:	3/19/2024
Laboratory Director:	Anthony J Scala		

Enalytic DUNS Reg. Number: 02-636-0096



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PJLA Testing

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 3/22/2024

Enalytic ID	E2403052-001
SOLUTIONAZE	From TANK # 9 to TANK # 4
Batch Number	303182024L
Sample ID	DEF 32.5%
Date Sampled	3/18/2024
Date Received	3/19/2024
ISO 17025	Certificate Number: L24-103

### Certificate of Analysis

Diesel Exhaust Fluid Analytical ISO-22241

Client ID: 32.5% DEF SOLUTIONAZE From TANK # 9 to TANK # 4 Batch # 303182024L

Test Parameter/Method	Units	Test	Acceptable	Results	Chemist	Analysis	Pass/
		Method (ISO) <sup>1</sup>	Limit <sup>2</sup>			Date	Fail
Urea Content	wt%	22241-2 Annex C	31.8-33.2	32.5	SPT	3/22/2024	Pass
Refractive Index @ 20degC	$N_D^{20}$	22241-2 Annex C	1.3814-1.3843	1.3828	MDC	3/22/2024	Pass
Alkalinity as NH <sub>3</sub>	%	22241-2 Annex D	<0.2	0.08	MDC	3/21/2024	Pass
Biuret	%	22241-2 Annex E	<0.3	0.11	MDC	3/20/2024	Pass
Aldehyde	mg/kg	22241-2 Annex F	<5.0	<1.0	MFB	3/21/2024	Pass
Insolubles	mg/kg	22241-2 Annex G	<20	<2.5	MFB	3/21/2024	Pass
Aluminum by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.10	BDK	3/20/2024	Pass
Calcium by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.10	BDK	3/20/2024	Pass
Chromium by ICP-OES	mg/kg	22241-2 Annex I	<0.2	<0.04	BDK	3/20/2024	Pass
Copper by ICP-OES	mg/kg	22241-2 Annex I	<0.2	0.20	BDK	3/20/2024	Pass
Iron by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.10	BDK	3/20/2024	Pass
Magnesium by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.10	BDK	3/20/2024	Pass
Nickel by ICP-OES	mg/kg	22241-2 Annex I	<0.2	0.060	BDK	3/20/2024	Pass
Phosphate by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.31	BDK	3/20/2024	Pass
Potassium by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.10	BDK	3/20/2024	Pass
Sodium by ICP-OES	mg/kg	22241-2 Annex I	<0.5	0.20	BDK	3/20/2024	Pass
Zinc by ICP-OES	mg/kg	22241-2 Annex I	<0.2	<0.04	BDK	3/20/2024	Pass
Miscellaneous Secondary Unregulated Quality Standards							
Identify by FTIR (attached) <sup>3</sup>	Spectra	22241-2 Annex J	Control Match	Match	MDC	3/20/2024	
Density @ 20degC	g/cm <sup>3</sup>	3675	Not Applicable	1.0938	MFB	3/22/2024	

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Date:

3/22/2024

Certification Approval \_\_\_\_\_

Laboratory Director: Anthony J Scala

Enalytic DUNS Reg. Number: 02-636-0096 Page 1 of 1



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PJLA Testing

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 3/26/2024

Certificate Number: L24-103

ISO 17025

**Quality: Excellent** 

# Certificate of Analysis

Diesel Exhaust Fluid Analytical ISO-22241

Client ID: 32.7% DEF Train # UTLX647984 Batch # 303202024M TANK # 2,4

Test Parameter/Method	Units	Test	Acceptable	Results	Chemist	Analysis	Pass/
		Method (ISO) <sup>1</sup>	Limit <sup>2</sup>			Date	Fail
Urea Content	wt%	22241-2 Annex C	31.8-33.2	32.3	SPT	3/25/2024	Pass
Refractive Index @ 20degC	$N_D^{20}$	22241-2 Annex C	1.3814-1.3843	1.3827	MDC	3/22/2024	Pass
Alkalinity as NH <sub>3</sub>	%	22241-2 Annex D	<0.2	0.06	MFB	3/25/2024	Pass
Biuret	%	22241-2 Annex E	<0.3	0.18	MDC	3/22/2024	Pass
Aldehyde	mg/kg	22241-2 Annex F	<5.0	<1.0	MFB	3/22/2024	Pass
Insolubles	mg/kg	22241-2 Annex G	<20	<2.5	MFB	3/25/2024	Pass
Aluminum by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.10	BDK	3/26/2024	Pass
Calcium by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.10	BDK	3/26/2024	Pass
Chromium by ICP-OES	mg/kg	22241-2 Annex I	<0.2	<0.04	BDK	3/26/2024	Pass
Copper by ICP-OES	mg/kg	22241-2 Annex I	<0.2	<0.04	BDK	3/26/2024	Pass
Iron by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.10	BDK	3/26/2024	Pass
Magnesium by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.10	BDK	3/26/2024	Pass
Nickel by ICP-OES	mg/kg	22241-2 Annex I	<0.2	<0.04	BDK	3/26/2024	Pass
Phosphate by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.31	BDK	3/26/2024	Pass
Potassium by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.10	BDK	3/26/2024	Pass
Sodium by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.10	BDK	3/26/2024	Pass
Zinc by ICP-OES	mg/kg	22241-2 Annex I	<0.2	<0.04	BDK	3/26/2024	Pass
Miscellaneous Secondary Unregulated Quality Standards							
Identify by FTIR (attached) <sup>3</sup>	Spectra	22241-2 Annex J	Control Match	Match	MDC	3/25/2024	
Density @ 20degC	g/cm <sup>3</sup>	3675	Not Applicable	1.0915	MDC	3/25/2024	

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Certification Approval \_

3/26/2024

Date:

Laboratory Director: Anthony J Scala

Enalytic DUNS Reg. Number: 02-636-0096



Report Date 3/27/2024

6034 Corporate Dr. East Syracuse NY 13057 Web Site: Enalytic.com Ph:315-437-0255

PJIA
Testing
ISO/IEC 17025:2017

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

Enalytic ID E2403055-001 Train # GBRX716286 Batch Number 303212024T TANK# 3 & 4 Sample ID DEF 32.5% Date Sampled 3/21/2024 Date Received 3/25/2024 ISO 17025 Certificate Number: L24-103

# Certificate of Analysis

Diesel Exhaust Fluid Analytical ISO-22241

Client ID: 32.5% DEF Train # GBRX716286 Batch # 03212024T TANK # 3 & 4

Test Parameter/Method	Units	Test	Acceptable	Results	Chemist	Analysis	Pass/
		Method (ISO) <sup>1</sup>	Limit <sup>2</sup>			Date	Fail
Urea Content	wt%	22241-2 Annex C	31.8-33.2	32.4	SPT	3/27/2024	Pass
Refractive Index @ 20degC	$N_D^{20}$	22241-2 Annex C	1.3814-1.3843	1.3828	MDC	3/26/2024	Pass
Alkalinity as NH <sub>3</sub>	%	22241-2 Annex D	<0.2	0.07	MFB	3/25/2024	Pass
Biuret	%	22241-2 Annex E	<0.3	0.18	MDC	3/26/2024	Pass
Aldehyde	mg/kg	22241-2 Annex F	<5.0	<1.0	MFB	3/26/2024	Pass
Insolubles	mg/kg	22241-2 Annex G	<20	<2.5	MFB	3/25/2024	Pass
Aluminum by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.10	BDK	3/26/2024	Pass
Calcium by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.10	BDK	3/26/2024	Pass
Chromium by ICP-OES	mg/kg	22241-2 Annex I	<0.2	<0.04	BDK	3/26/2024	Pass
Copper by ICP-OES	mg/kg	22241-2 Annex I	<0.2	0.051	BDK	3/26/2024	Pass
Iron by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.10	BDK	3/26/2024	Pass
Magnesium by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.10	BDK	3/26/2024	Pass
Nickel by ICP-OES	mg/kg	22241-2 Annex I	<0.2	0.041	BDK	3/26/2024	Pass
Phosphate by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.31	BDK	3/26/2024	Pass
Potassium by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.10	BDK	3/26/2024	Pass
Sodium by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.10	BDK	3/26/2024	Pass
Zinc by ICP-OES	mg/kg	22241-2 Annex I	<0.2	<0.04	BDK	3/26/2024	Pass
Miscellaneous Secondary Unregulated Quality Standards							
Identify by FTIR (attached) <sup>3</sup>	Spectra	22241-2 Annex J	Control Match	Match	MDC	3/26/2024	
Density @ 20degC	g/cm <sup>3</sup>	3675	Not Applicable	1.0908	MFB	3/27/2024	

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Laboratory Director: Anthony J Scala

Enalytic DUNS Reg. Number: 02-636-0096

Date: 3/27/2024

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6034 Corporate Dr. East Syracuse NY 13057 Web Site: Enalytic.com Ph:315-437-0255

ISO/IEC 17025:2017

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 4/2/2024

Enalytic ID	E2403060-001
Train #	GBRX705230
Batch Number	303252024T
TANK#	1
Sample ID	DEF 32.4%
Date Sampled	3/25/2024
Date Received	3/28/2024
ISO 17025	Certificate Number: L24-103

## Certificate of Analysis

Diesel Exhaust Fluid Analytical ISO-22241

Client ID: 32.4% DEF Train # GBRX705230 Batch # 03252024T TANK # 1

Test Parameter/Method	Units	Test	Acceptable	Results	Chemist	Analysis	Pass/
		Method (ISO) <sup>1</sup>	Limit <sup>2</sup>			Date	Fail
Urea Content	wt%	22241-2 Annex C	31.8-33.2	32.2	SPT	4/2/2024	Pass
Refractive Index @ 20degC	$N_D^{20}$	22241-2 Annex C	1.3814-1.3843	1.3824	MDC	4/2/2024	Pass
Alkalinity as NH <sub>3</sub>	%	22241-2 Annex D	<0.2	0.08	MFB	4/2/2024	Pass
Biuret	%	22241-2 Annex E	<0.3	0.17	MDC	4/1/2024	Pass
Aldehyde	mg/kg	22241-2 Annex F	<5.0	<1.0	MFB	4/1/2024	Pass
Insolubles	mg/kg	22241-2 Annex G	<20	<2.5	MFB	4/1/2024	Pass
Aluminum by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.10	BDK	3/28/2024	Pass
Calcium by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.10	BDK	3/28/2024	Pass
Chromium by ICP-OES	mg/kg	22241-2 Annex I	<0.2	<0.04	BDK	3/28/2024	Pass
Copper by ICP-OES	mg/kg	22241-2 Annex I	<0.2	0.089	BDK	3/28/2024	Pass
Iron by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.10	BDK	3/28/2024	Pass
Magnesium by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.10	BDK	3/28/2024	Pass
Nickel by ICP-OES	mg/kg	22241-2 Annex I	<0.2	0.079	BDK	3/28/2024	Pass
Phosphate by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.31	BDK	3/28/2024	Pass
Potassium by ICP-OES	mg/kg	22241-2 Annex I	<0.5	0.28	BDK	3/28/2024	Pass
Sodium by ICP-OES	mg/kg	22241-2 Annex I	<0.5	0.18	BDK	3/28/2024	Pass
Zinc by ICP-OES	mg/kg	22241-2 Annex I	<0.2	0.049	BDK	3/28/2024	Pass
Miscellaneous Secondary Unregulated Quality Standards							
Identify by FTIR (attached) <sup>3</sup>	Spectra	22241-2 Annex J	Control Match	Match	MDC	4/2/2024	
Density @ 20degC	g/cm <sup>3</sup>	3675	Not Applicable	1.0913	MFB	4/2/2024	

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	
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Laboratory Director: Anthony J Scala Enalytic DUNS Reg. Number: 02-636-0096 Date: 4/2/2024



6034 Corporate Dr. East Syracuse NY 13057 Web Site: Enalytic.com Ph:315-437-0255

ISO/IEC 17025:2017

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 4/5/2024

Enalytic ID	E2404009-001
Train #	GATX223448
Batch Number	303292024L
TANKS #	5 & <i>4</i>
Sample ID	DEF 32.5%
Date Sampled	3/29/2024
Date Received	4/2/2024
ISO 17025	Certificate Number: L24-103

#### Certificate of Analysis

Diesel Exhaust Fluid Analytical ISO-22241

Client ID: 32.5% DEF Train # GATX223448 TANKS # 5 & 4 Batch # 303292024L

Test Parameter/Method	Units	Test	Acceptable	Results	Chemist	Analysis	Pass/
		Method (ISO) <sup>1</sup>	Limit <sup>2</sup>			Date	Fail
Urea Content	wt%	22241-2 Annex C	31.8-33.2	32.1	SPT	4/3/2024	Pass
Refractive Index @ 20degC	$N_D^{20}$	22241-2 Annex C	1.3814-1.3843	1.3824	MDC	4/3/2024	Pass
Alkalinity as NH <sub>3</sub>	%	22241-2 Annex D	<0.2	0.07	MFB	4/4/2024	Pass
Biuret	%	22241-2 Annex E	<0.3	0.17	MDC	4/3/2024	Pass
Aldehyde	mg/kg	22241-2 Annex F	<5.0	<1.0	MFB	4/3/2024	Pass
Insolubles	mg/kg	22241-2 Annex G	<20	<2.5	MFB	4/3/2024	Pass
Aluminum by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.10	BDK	4/3/2024	Pass
Calcium by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.10	BDK	4/3/2024	Pass
Chromium by ICP-OES	mg/kg	22241-2 Annex I	<0.2	<0.04	BDK	4/3/2024	Pass
Copper by ICP-OES	mg/kg	22241-2 Annex I	<0.2	<0.04	BDK	4/3/2024	Pass
Iron by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.10	BDK	4/3/2024	Pass
Magnesium by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.10	BDK	4/3/2024	Pass
Nickel by ICP-OES	mg/kg	22241-2 Annex I	<0.2	<0.04	BDK	4/3/2024	Pass
Phosphate by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.31	BDK	4/3/2024	Pass
Potassium by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.10	BDK	4/3/2024	Pass
Sodium by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.10	BDK	4/3/2024	Pass
Zinc by ICP-OES	mg/kg	22241-2 Annex I	<0.2	<0.04	BDK	4/3/2024	Pass
Miscellaneous Secondary Unregulated Quality Standards							
Identify by FTIR (attached)3	Spectra	22241-2 Annex J	Control Match	Match	MDC	4/3/2024	
Density @ 20degC	g/cm <sup>3</sup>	3675	Not Applicable	1.0895	MDC	4/4/2024	

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

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Note 3: ISO 17025 accreditation not applied for.

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Certification App	oroval
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Laboratory Director: Anthony J Scala

Enalytic DUNS Reg. Number: 02-636-0096

4/5/2024 Date:

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