

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	1/20/2022



Enalytic ID	E2201026-001
Batch Number	301142022M
Train Number	TILX265257
Sample ID	DEF 32.5%
Date Sampled	1/14/2022
Date Received	1/17/2022
ISO 17025	Certificate Number: AT-2956

Certificate of Analysis

Diesel Exhaust Fluid Analytical ISO-22241 Client ID: 32.5% DEF Batch # 301142022M Train # TILX265257

Test Parameter/Method	Units	Test	Acceptable	Results	Chemist	Analysis	Pass/
		Method (ISO) ¹	Limit ²			Date	Fail
Urea Content	wt%	22241-2 Annex C	31.8-33.4	32.7	SPT	1/19/2022	Pass
Refractive Index @ 20degC	N _D ²⁰	22241-2 Annex C	1.3814-1.3843	1.3832	ALB	1/18/2022	Pass
Alkalinity as NH ₃	%	22241-2 Annex D	<0.2	0.02	MDC	1/19/2022	Pass
Biuret	%	22241-2 Annex E	<0.3	0.12	ALB	1/19/2022	Pass
Aldehyde	mg/kg	22241-2 Annex F	<5.0	<1.0	ALB	1/19/2022	Pass
Insolubles	mg/kg	22241-2 Annex G	<20	3.7	MDC	1/18/2022	Pass
Aluminum by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.05	DSD	1/19/2022	Pass
Calcium by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.05	DSD	1/19/2022	Pass
Chromium by ICP-OES	mg/kg	22241-2 Annex I	<0.2	0.070	DSD	1/19/2022	Pass
Copper by ICP-OES	mg/kg	22241-2 Annex I	<0.2	<0.02	DSD	1/19/2022	Pass
Iron by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.05	DSD	1/19/2022	Pass
Magnesium by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.05	DSD	1/19/2022	Pass
Nickel by ICP-OES	mg/kg	22241-2 Annex I	<0.2	<0.02	DSD	1/19/2022	Pass
Phosphate by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.25	DSD	1/19/2022	Pass
Potassium by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.05	DSD	1/19/2022	Pass
Sodium by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.05	DSD	1/19/2022	Pass
Zinc by ICP-OES	mg/kg	22241-2 Annex I	<0.2	<0.02	DSD	1/19/2022	Pass

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Identify by FTIR (attached) ³	Spectra	22241-2 Annex J	Control Match	Match	ALB	1/18/2022	
Density @ 20degC	g/cm ³	3675	Not Applicable	1.0908	ALB	1/18/2022	

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.

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Certification Approval

Laboratory Director: Anthony J Scala

Date: 1/20/2022

Enalytic DUNS Reg. Number: 02-636-0096



Client:	DEF Products, LLC
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Address	422 East Barioni Blvd
	Imperial, CA 02251
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Phone	760 355 7997
Report Date	1/27/2022



Enalytic ID	E2201041-001
Batch Number	301172022M
Train Number	KLRX243052
Sample ID	DEF 32.5%
Date Sampled	1/17/2022
Date Received	1/25/2022
ISO 17025	Certificate Number: AT-2956

Certificate of Analysis

Diesel Exhaust Fluid Analytical ISO-22241

Client ID: 32.5% DEF Batch # 301172022M Train # KLRX243052

Test Parameter/Method	Units	Test	Acceptable	Results	Chemist	Analysis	Pass/
		Method (ISO) ¹	Limit ²			Date	Fail
Urea Content	wt%	22241-2 Annex C	31.8-33.4	32.5	SPT	1/27/2022	Pass
Refractive Index @ 20degC	N _D ²⁰	22241-2 Annex C	1.3814-1.3843	1.3830	ALB	1/26/2022	Pass
Alkalinity as NH ₃	%	22241-2 Annex D	<0.2	0.02	ALB	1/26/2022	Pass
Biuret	%	22241-2 Annex E	<0.3	0.14	ALB	1/27/2022	Pass
Aldehyde	mg/kg	22241-2 Annex F	<5.0	<1.0	ALB	1/26/2022	Pass
Insolubles	mg/kg	22241-2 Annex G	<20	<2.0	MDC	1/26/2022	Pass
Aluminum by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.05	DSD	1/25/2022	Pass
Calcium by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.05	DSD	1/25/2022	Pass
Chromium by ICP-OES	mg/kg	22241-2 Annex I	<0.2	0.094	DSD	1/25/2022	Pass
Copper by ICP-OES	mg/kg	22241-2 Annex I	<0.2	0.13	DSD	1/25/2022	Pass
Iron by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.05	DSD	1/25/2022	Pass
Magnesium by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.05	DSD	1/25/2022	Pass
Nickel by ICP-OES	mg/kg	22241-2 Annex I	<0.2	0.049	DSD	1/25/2022	Pass
Phosphate by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.25	DSD	1/25/2022	Pass
Potassium by ICP-OES	mg/kg	22241-2 Annex I	<0.5	0.22	DSD	1/25/2022	Pass
Sodium by ICP-OES	mg/kg	22241-2 Annex I	<0.5	0.11	DSD	1/25/2022	Pass
Zinc by ICP-OES	mg/kg	22241-2 Annex I	<0.2	<0.02	DSD	1/25/2022	Pass

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Identify by FTIR (attached) ³	Spectra	22241-2 Annex J	Control Match	Match	ALB	1/26/2022	
Density @ 20degC	g/cm ³	3675	Not Applicable	1.0913	ALB	1/26/2022	

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Certification Approval

Laboratory Director: Anthony J Scala

Date: 1/27/2022



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	Imperial, CA 02251
Email	defproducts@gmail.com
Phone	760 355 7997
Report Date	1/27/2022



Enalytic ID	E2201042-001
Batch Number	301202022L
Train Number	TILX265233
Sample ID	DEF 32.5%
Date Sampled	1/20/2022
Date Received	1/25/2022
ISO 17025	Certificate Number: AT-2956

Certificate of Analysis

Diesel Exhaust Fluid Analytical ISO-22241 Client ID: 32.5% DEF Batch # 301202022L Train # TILX265233

Test Parameter/Method	Units	Test	Acceptable	Results	Chemist	Analysis	Pass/
		Method (ISO) ¹	Limit ²			Date	Fail
Urea Content	wt%	22241-2 Annex C	31.8-33.4	32.6	SPT	1/27/2022	Pass
Refractive Index @ 20degC	N _D ²⁰	22241-2 Annex C	1.3814-1.3843	1.3831	ALB	1/26/2022	Pass
Alkalinity as NH ₃	%	22241-2 Annex D	<0.2	0.03	ALB	1/26/2022	Pass
Biuret	%	22241-2 Annex E	<0.3	0.11	ALB	1/27/2022	Pass
Aldehyde	mg/kg	22241-2 Annex F	<5.0	<1.0	ALB	1/26/2022	Pass
Insolubles	mg/kg	22241-2 Annex G	<20	<2.0	MDC	1/26/2022	Pass
Aluminum by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.05	DSD	1/25/2022	Pass
Calcium by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.05	DSD	1/25/2022	Pass
Chromium by ICP-OES	mg/kg	22241-2 Annex I	<0.2	0.10	DSD	1/25/2022	Pass
Copper by ICP-OES	mg/kg	22241-2 Annex I	<0.2	0.20	DSD	1/25/2022	Pass
Iron by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.05	DSD	1/25/2022	Pass
Magnesium by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.05	DSD	1/25/2022	Pass
Nickel by ICP-OES	mg/kg	22241-2 Annex I	<0.2	0.070	DSD	1/25/2022	Pass
Phosphate by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.25	DSD	1/25/2022	Pass
Potassium by ICP-OES	mg/kg	22241-2 Annex I	<0.5	0.31	DSD	1/25/2022	Pass
Sodium by ICP-OES	mg/kg	22241-2 Annex I	<0.5	0.15	DSD	1/25/2022	Pass
Zinc by ICP-OES	mg/kg	22241-2 Annex I	<0.2	<0.02	DSD	1/25/2022	Pass

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Identify by FTIR (attached) ³	Spectra	22241-2 Annex J	Control Match	Match	ALB	1/26/2022	
Density @ 20degC	g/cm ³	3675	Not Applicable	1.0913	ALB	1/26/2022	

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Laboratory Director: Anthony J Scala

Date: 1/27/2022



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Address	422 East Barioni Blvd
	Imperial, CA 02251
Email	defproducts@gmail.com
Phone	760 355 7997
Report Date	1/28/2022



Enalytic ID	E2201043-001
Batch Number	301252022L
Train Number	TILX265175
Sample ID	DEF 32.5%
Date Sampled	1/25/2022
Date Received	1/26/2022
ISO 17025	Certificate Number: AT-2956

Certificate of Analysis

Diesel Exhaust Fluid Analytical ISO-22241 Client ID: 32.5% DEF Batch # 301252022L Train # TILX265175

Test Parameter/Method	Units	Test	Acceptable	Results	Chemist	Analysis	Pass/
		Method (ISO) ¹	Limit ²			Date	Fail
Urea Content	wt%	22241-2 Annex C	31.8-33.4	32.4	SPT	1/27/2022	Pass
Refractive Index @ 20degC	N _D ²⁰	22241-2 Annex C	1.3814-1.3843	1.3828	MDC	1/26/2022	Pass
Alkalinity as NH ₃	%	22241-2 Annex D	<0.2	0.03	ALB	1/26/2022	Pass
Biuret	%	22241-2 Annex E	<0.3	0.12	ALB	1/27/2022	Pass
Aldehyde	mg/kg	22241-2 Annex F	<5.0	<1.0	ALB	1/26/2022	Pass
Insolubles	mg/kg	22241-2 Annex G	<20	<2.0	MDC	1/26/2022	Pass
Aluminum by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.05	DSD	1/27/2022	Pass
Calcium by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.05	DSD	1/27/2022	Pass
Chromium by ICP-OES	mg/kg	22241-2 Annex I	<0.2	0.060	DSD	1/27/2022	Pass
Copper by ICP-OES	mg/kg	22241-2 Annex I	<0.2	<0.02	DSD	1/27/2022	Pass
Iron by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.05	DSD	1/27/2022	Pass
Magnesium by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.05	DSD	1/27/2022	Pass
Nickel by ICP-OES	mg/kg	22241-2 Annex I	<0.2	<0.02	DSD	1/27/2022	Pass
Phosphate by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.25	DSD	1/27/2022	Pass
Potassium by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.05	DSD	1/27/2022	Pass
Sodium by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.05	DSD	1/27/2022	Pass
Zinc by ICP-OES	mg/kg	22241-2 Annex I	<0.2	<0.02	DSD	1/27/2022	Pass

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Identify by FTIR (attached) ³	Spectra	22241-2 Annex J	Control Match	Match	MDC	1/26/2022	
Density @ 20degC	g/cm ³	3675	Not Applicable	1.0908	MDC	1/26/2022	

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Certification Approval

Laboratory Director: Anthony J Scala

Date: 1/28/2022

Page 1 of 1



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	1/28/2022



Enalytic ID	E2201043-002
Batch Number	301252022M
Train Number	KLRX243029
Sample ID	DEF 32.5%
Date Sampled	1/25/2022
Date Received	1/26/2022
ISO 17025	Certificate Number: AT-2956

Certificate of Analysis

Diesel Exhaust Fluid Analytical ISO-22241

Client ID: 32.5% DEF Batch # 301252022M Train # KLRX243029

% 20 /kg /kg	Method (ISO) ¹ 22241-2 Annex C 22241-2 Annex C 22241-2 Annex D 22241-2 Annex E 22241-2 Annex F 22241-2 Annex G	31.8-33.4 1.3814-1.3843 <0.2 <0.3 <5.0	32.6 1.3831 0.03 0.13 <1.0	SPT MDC ALB ALB ALB	Date 1/27/2022 1/26/2022 1/26/2022 1/27/2022 1/26/2022	Fail Pass Pass Pass Pass
²⁰ /kg /kg	22241-2 Annex C 22241-2 Annex D 22241-2 Annex E 22241-2 Annex F	1.3814-1.3843 <0.2 <0.3 <5.0	1.3831 0.03 0.13	MDC ALB ALB	1/26/2022 1/26/2022 1/27/2022	Pass Pass Pass
/kg /kg	22241-2 Annex D 22241-2 Annex E 22241-2 Annex F	<0.2 <0.3 <5.0	0.03 0.13	ALB ALB	1/26/2022 1/27/2022	Pass Pass
/kg /kg	22241-2 Annex E 22241-2 Annex F	<0.3 <5.0	0.13	ALB	1/27/2022	Pass
′kg ′kg	22241-2 Annex F	<5.0				
/kg	-		<1.0	ALB	1/26/2022	D
-	22241-2 Annex G	-00			1/20/2022	Pass
//		<20	<2.0	MDC	1/26/2022	Pass
′kg	22241-2 Annex I	<0.5	<0.05	DSD	1/27/2022	Pass
′kg	22241-2 Annex I	<0.5	<0.05	DSD	1/27/2022	Pass
′kg	22241-2 Annex I	<0.2	0.074	DSD	1/27/2022	Pass
′kg	22241-2 Annex I	<0.2	<0.02	DSD	1/27/2022	Pass
′kg	22241-2 Annex I	<0.5	<0.05	DSD	1/27/2022	Pass
′kg	22241-2 Annex I	<0.5	<0.05	DSD	1/27/2022	Pass
′kg	22241-2 Annex I	<0.2	<0.02	DSD	1/27/2022	Pass
′kg	22241-2 Annex I	<0.5	<0.25	DSD	1/27/2022	Pass
′kg	22241-2 Annex I	<0.5	<0.05	DSD	1/27/2022	Pass
′kg	22241-2 Annex I	<0.5	<0.05	DSD	1/27/2022	Pass
/kg	22241-2 Annex I	<0.2	<0.02	DSD	1/27/2022	Pass
	/kg /kg /kg /kg /kg /kg /kg /kg /kg	/kg 22241-2 Annex I /kg 22241-2 Annex I	/kg 22241-2 Annex I <0.2	/kg 22241-2 Annex I <0.2	/kg 22241-2 Annex I <0.2 0.074 DSD /kg 22241-2 Annex I <0.2	/kg 22241-2 Annex I <0.2 0.074 DSD 1/27/2022 /kg 22241-2 Annex I <0.2 <0.02 DSD 1/27/2022 /kg 22241-2 Annex I <0.5 <0.05 DSD 1/27/2022 /kg 22241-2 Annex I <0.5 <0.05 DSD 1/27/2022 /kg 22241-2 Annex I <0.5 <0.05 DSD 1/27/2022 /kg 22241-2 Annex I <0.5 <0.02 DSD 1/27/2022 /kg 22241-2 Annex I <0.5 <0.25 DSD 1/27/2022 /kg 22241-2 Annex I <0.5 <0.05 DSD 1/27/2022 /kg 22241-2 Annex I <0.2 <0.2 DSD 1/27/2022 /kg 22241-2 Annex I <0.2 <0.2 DSD 1/27/2022

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Identify by FTIR (attached) ³	Spectra	22241-2 Annex J	Control Match	Match	MDC	1/26/2022	
Density @ 20degC	g/cm ³	3675	Not Applicable	1.0913	MDC	1/26/2022	

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Certification Approval

Laboratory Director: Anthony J Scala

Date: 1/28/2022

Enalytic DUNS Reg. Number: 02-636-0096



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	2/2/2022



Enalytic ID	E2201044-001
Batch Number	301262022M
Train Number	GAXT223442
Sample ID	DEF 32.5%
Date Sampled	1/26/2022
Date Received	1/28/2022
ISO 17025	Certificate Number: AT-2956

Certificate of Analysis

Diesel Exhaust Fluid Analytical ISO-22241

Client ID: 32.5% DEF Batch # 301262022M Train # GAXT223442

Test Parameter/Method	Units	Test	Acceptable	Results	Chemist	Analysis	Pass/
		Method (ISO) ¹	Limit ²			Date	Fail
Urea Content	wt%	22241-2 Annex C	31.8-33.4	32.8	SPT	2/1/2022	Pass
Refractive Index @ 20degC	N _D ²⁰	22241-2 Annex C	1.3814-1.3843	1.3835	ALB	1/31/2022	Pass
Alkalinity as NH ₃	%	22241-2 Annex D	<0.2	0.09	ALB	1/31/2022	Pass
Biuret	%	22241-2 Annex E	<0.3	0.16	MDC	1/28/2022	Pass
Aldehyde	mg/kg	22241-2 Annex F	<5.0	<1.0	MDC	1/31/2022	Pass
Insolubles	mg/kg	22241-2 Annex G	<20	<2.0	MDC	1/31/2022	Pass
Aluminum by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.05	DSD	2/1/2022	Pass
Calcium by ICP-OES	mg/kg	22241-2 Annex I	<0.5	0.19	DSD	2/1/2022	Pass
Chromium by ICP-OES	mg/kg	22241-2 Annex I	<0.2	0.049	DSD	2/1/2022	Pass
Copper by ICP-OES	mg/kg	22241-2 Annex I	<0.2	<0.02	DSD	2/1/2022	Pass
Iron by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.05	DSD	2/1/2022	Pass
Magnesium by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.05	DSD	2/1/2022	Pass
Nickel by ICP-OES	mg/kg	22241-2 Annex I	<0.2	<0.02	DSD	2/1/2022	Pass
Phosphate by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.25	DSD	2/1/2022	Pass
Potassium by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.05	DSD	2/1/2022	Pass
Sodium by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.05	DSD	2/1/2022	Pass
Zinc by ICP-OES	mg/kg	22241-2 Annex I	<0.2	<0.02	DSD	2/1/2022	Pass
	Mis	scellaneous Seco	ondary Unregula	ated Qualit	y Standards		

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Identify by FTIR (attached) ³	Spectra	22241-2 Annex J	Control Match	Match	ALB	1/31/2022	
Density @ 20degC	g/cm ³	3675	Not Applicable	1.0913	ALB	1/31/2022	

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Certification Approval

Laboratory Director: Anthony J Scala

Date: 2/2/2022



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	2/2/2022



Enalytic ID	E2201044-002
Batch Number	301262022P
Train Number	TILX265596
Sample ID	DEF 32.5%
Date Sampled	1/26/2022
Date Received	1/28/2022
ISO 17025	Certificate Number: AT-2956

Certificate of Analysis

Diesel Exhaust Fluid Analytical ISO-22241

Client ID: 32.5% DEF Batch # 301262022P Train # TILX265596

Test Parameter/Method	Units	Test	Acceptable	Results	Chemist	Analysis	Pass/
		Method (ISO) ¹	Limit ²			Date	Fail
Urea Content	wt%	22241-2 Annex C	31.8-33.4	32.8	SPT	2/1/2022	Pass
Refractive Index @ 20degC	N _D ²⁰	22241-2 Annex C	1.3814-1.3843	1.3834	ALB	1/31/2022	Pass
Alkalinity as NH ₃	%	22241-2 Annex D	<0.2	0.09	ALB	1/31/2022	Pass
Biuret	%	22241-2 Annex E	<0.3	0.16	MDC	1/28/2022	Pass
Aldehyde	mg/kg	22241-2 Annex F	<5.0	<1.0	MDC	1/31/2022	Pass
Insolubles	mg/kg	22241-2 Annex G	<20	<2.0	MDC	1/31/2022	Pass
Aluminum by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.05	DSD	2/1/2022	Pass
Calcium by ICP-OES	mg/kg	22241-2 Annex I	<0.5	0.21	DSD	2/1/2022	Pass
Chromium by ICP-OES	mg/kg	22241-2 Annex I	<0.2	0.055	DSD	2/1/2022	Pass
Copper by ICP-OES	mg/kg	22241-2 Annex I	<0.2	0.035	DSD	2/1/2022	Pass
Iron by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.05	DSD	2/1/2022	Pass
Magnesium by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.05	DSD	2/1/2022	Pass
Nickel by ICP-OES	mg/kg	22241-2 Annex I	<0.2	<0.02	DSD	2/1/2022	Pass
Phosphate by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.25	DSD	2/1/2022	Pass
Potassium by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.05	DSD	2/1/2022	Pass
Sodium by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.05	DSD	2/1/2022	Pass
Zinc by ICP-OES	mg/kg	22241-2 Annex I	<0.2	<0.02	DSD	2/1/2022	Pass

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Identify by FTIR (attached) ³	Spectra	22241-2 Annex J	Control Match	Match	ALB	1/31/2022	
Density @ 20degC	g/cm ³	3675	Not Applicable	1.0913	ALB	1/31/2022	

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Certification Approval

Laboratory Director: Anthony J Scala

Date: 2/2/2022



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	2/2/2022



Enalytic ID	E2201048-001
Batch Number	301272022M
Train Number	UTLX647674
Sample ID	DEF 32.5%
Date Sampled	1/27/2022
Date Received	1/31/2022
ISO 17025	Certificate Number: AT-2956

Certificate of Analysis

Diesel Exhaust Fluid Analytical ISO-22241

Client ID: 32.5% DEF Batch # 301272022M Train # UTLX647674

alysis Pass/	Chemist	Results	Acceptable	Test	Units	Test Parameter/Method
Date Fail			Limit ²	Method (ISO) ¹		
2/2022 Pass	SPT	32.5	31.8-33.4	22241-2 Annex C	wt%	Urea Content
2/2022 Pass	ALB	1.3830	1.3814-1.3843	22241-2 Annex C	N _D ²⁰	Refractive Index @ 20degC
1/2022 Pass	ALB	0.08	<0.2	22241-2 Annex D	%	Alkalinity as NH ₃
1/2022 Pass	MDC	0.15	<0.3	22241-2 Annex E	%	Biuret
2/2022 Pass	MDC	<1.0	<5.0	22241-2 Annex F	mg/kg	Aldehyde
1/2022 Pass	MDC	<2.0	<20	22241-2 Annex G	mg/kg	Insolubles
1/2022 Pass	DSD	<0.05	<0.5	22241-2 Annex I	mg/kg	Aluminum by ICP-OES
1/2022 Pass	DSD	0.19	<0.5	22241-2 Annex I	mg/kg	Calcium by ICP-OES
1/2022 Pass	DSD	0.055	<0.2	22241-2 Annex I	mg/kg	Chromium by ICP-OES
1/2022 Pass	DSD	0.025	<0.2	22241-2 Annex I	mg/kg	Copper by ICP-OES
1/2022 Pass	DSD	<0.05	<0.5	22241-2 Annex I	mg/kg	Iron by ICP-OES
1/2022 Pass	DSD	<0.05	<0.5	22241-2 Annex I	mg/kg	Magnesium by ICP-OES
1/2022 Pass	DSD	<0.02	<0.2	22241-2 Annex I	mg/kg	Nickel by ICP-OES
1/2022 Pass	DSD	<0.25	<0.5	22241-2 Annex I	mg/kg	Phosphate by ICP-OES
1/2022 Pass	DSD	<0.05	<0.5	22241-2 Annex I	mg/kg	Potassium by ICP-OES
1/2022 Pass	DSD	<0.05	<0.5	22241-2 Annex I	mg/kg	Sodium by ICP-OES
1/2022 Pass	DSD	<0.02	<0.2	22241-2 Annex I	mg/kg	Zinc by ICP-OES
1/2022				22241-2 Annex I scellaneous Seco		Zinc by ICP-OES

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Identify by FTIR (attached) ³	Spectra	22241-2 Annex J	Control Match	Match	ALB	1/31/2022	
Density @ 20degC	g/cm ³	3675	Not Applicable	1.0903	ALB	2/2/2022	

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Certification Approval

Laboratory Director: Anthony J Scala

Date: 2/2/2022

Enalytic DUNS Reg. Number: 02-636-0096



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	2/2/2022



Enalytic ID	E2201048-002
Batch Number	301292022P
Train Number	UTLX647675
Sample ID	DEF 32.5%
Date Sampled	1/27/2022
Date Received	1/31/2022
ISO 17025	Certificate Number: AT-2956

Certificate of Analysis

Diesel Exhaust Fluid Analytical ISO-22241

Client ID: 32.5% DEF Batch # 301292022P Train # UTLX647675

Test Parameter/Method	Units	Test	Acceptable	Results	Chemist	Analysis	Pass/
		Method (ISO) ¹	Limit ²			Date	Fail
Urea Content	wt%	22241-2 Annex C	31.8-33.4	32.6	SPT	2/2/2022	Pass
Refractive Index @ 20degC	N _D ²⁰	22241-2 Annex C	1.3814-1.3843	1.3831	ALB	2/2/2022	Pass
Alkalinity as NH ₃	%	22241-2 Annex D	<0.2	0.09	ALB	1/31/2022	Pass
Biuret	%	22241-2 Annex E	<0.3	0.16	MDC	2/1/2022	Pass
Aldehyde	mg/kg	22241-2 Annex F	<5.0	<1.0	MDC	2/2/2022	Pass
Insolubles	mg/kg	22241-2 Annex G	<20	<2.0	MDC	1/31/2022	Pass
Aluminum by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.05	DSD	2/1/2022	Pass
Calcium by ICP-OES	mg/kg	22241-2 Annex I	<0.5	0.21	DSD	2/1/2022	Pass
Chromium by ICP-OES	mg/kg	22241-2 Annex I	<0.2	0.050	DSD	2/1/2022	Pass
Copper by ICP-OES	mg/kg	22241-2 Annex I	<0.2	0.025	DSD	2/1/2022	Pass
Iron by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.05	DSD	2/1/2022	Pass
Magnesium by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.05	DSD	2/1/2022	Pass
Nickel by ICP-OES	mg/kg	22241-2 Annex I	<0.2	<0.02	DSD	2/1/2022	Pass
Phosphate by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.25	DSD	2/1/2022	Pass
Potassium by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.05	DSD	2/1/2022	Pass
Sodium by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.05	DSD	2/1/2022	Pass
Zinc by ICP-OES	mg/kg	22241-2 Annex I	<0.2	<0.02	DSD	2/1/2022	Pass

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Identify by FTIR (attached) ³	Spectra	22241-2 Annex J	Control Match	Match	ALB	1/31/2022	
Density @ 20degC	g/cm ³	3675	Not Applicable	1.0903	ALB	2/2/2022	

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