

Client:	DEF Products, LLC
Contact	Sharon Stegmuller
Address	422 East Barioni Blvd Imperial, CA 02251
Email	defproducts@gmail.com
Phone	760 427 4470

Analytic ID:	E1710080-001
Batch Number	309132017
Sample ID	PERCENT DEF 40.0%
Date Sampled	10/23/2017
Date Received	10/25/2017
Report Date	10/30/2017

Certificate of Analysis

Diesel Exhaust Fluid Analytical ISO-22241

Client ID: Batch # 309132017 PERCENT DEF 40.0%

Test Parameter/Method	Units	Test Method (ISO)	Acceptable Limit	Results	Chemist	Analysis Date	Pass/Fail
Urea Content	wt%	22241-2 Annex C	31.8-33.2	39.9	SPT	10/26/2017	Pass
Density @ 20degC	g/cm ³	3675	1.0870-1.0930	1.1080	CLB	10/26/2017	Pass
Refractive Index @ 20degC	N _D ²⁰	22241-2 Annex C	1.3814-1.3843	1.3943	CLB	10/26/2017	Pass
Alkalinity as NH ₃	%	22241-2 Annex D	<0.2	<0.01	CLB	10/27/2017	Pass
Biuret	%	22241-2 Annex E	<0.3	0.26	CLB	10/26/2017	Pass
Aldehyde	mg/kg	22241-2 Annex F	<5	2.7	CLB	10/30/2017	Pass
Insolubles	mg/kg	22241-2 Annex G	<20	<2	CLB	10/26/2017	Pass
Phosphate	mg/kg	22241-2 Annex H	<0.5	<0.25	CLB	10/26/2017	Pass
Calcium by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.05	BDK	10/25/2017	Pass
Iron by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.05	BDK	10/25/2017	Pass
Copper by ICP-OES	mg/kg	22241-2 Annex I	<0.2	<0.02	BDK	10/25/2017	Pass
Zinc by ICP-OES	mg/kg	22241-2 Annex I	<0.2	<0.02	BDK	10/25/2017	Pass
Chromium by ICP-OES	mg/kg	22241-2 Annex I	<0.2	<0.02	BDK	10/25/2017	Pass
Nickel by ICP-OES	mg/kg	22241-2 Annex I	<0.2	<0.02	BDK	10/25/2017	Pass
Aluminum by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.05	BDK	10/25/2017	Pass
Magnesium by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.05	BDK	10/25/2017	Pass
Sodium by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.05	BDK	10/25/2017	Pass
Potassium by ICP-OES	mg/kg	22241-2 Annex I	<0.5	<0.05	BDK	10/25/2017	Pass
Identity by FTIR (attached)	Spectra	22241-2 Annex J	Match	Reference Match	BDK	10/30/2017	Pass

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

"The undersigned certifies that the value(s) reported have met the highest analytical quality control standards."



Certification Approval _____

Laboratory Director: Anthony J Scala

Enalytic FDA Reg. Number: 02-636-0096

Date: 10/30/2017