



Sample ID	120318-CHPSH135
Batch #	12032018-1
Date Sampled	12/3/2018
Report Date	12/3/2018

Diesel Exhaust Fluid per ISO 22241¹

Characteristics	Unit	Test Methods	Limits		Acceptance Range ²		Results
			min.	max.	min.	max.	
Urea content	% (m/m)	ISO 22241-2 Annex C	31.8	33.2	30.8	34.2	32.5
Density at 20°C	kg/m ³	ISO 3675 or ISO 12185	1087.0	1093.0	1086.5	1093.5	1090.7
Refractive index at 20°C	---	ISO 22241-2 Annex C	1.3814	1.3843	1.3804	1.3853	1.3823
Alkalinity as NH ₃	%m/m	ISO 22241-2 Annex D	---	0.2	---	0.24	0.01
Biuret	%m/m	ISO 22241-2 Annex E	---	0.3	---	0.34	0.23
Aldehydes	mg/kg	ISO 22241-2 Annex F	---	5.0	---	7.4	1.30
Insoluble matter	mg/kg	ISO 22241-2 Annex G	---	20	---	27.6	1.60
Phosphate (PO ₄)	mg/kg	ISO 22241-2 Annex H	---	0.5	---	0.53	0.06
Calcium	mg/kg	ISO 22241-2 Annex I	---	0.5	---	0.55	0.04
Iron	mg/kg	ISO 22241-2 Annex I	---	0.5	---	0.65	0.00
Copper	mg/kg	ISO 22241-2 Annex I	---	0.2	---	0.24	0.03
Zinc	mg/kg	ISO 22241-2 Annex I	---	0.2	---	0.26	0.00
Chromium	mg/kg	ISO 22241-2 Annex I	---	0.2	---	0.26	0.07
Nickel	mg/kg	ISO 22241-2 Annex I	---	0.2	---	0.26	0.06
Aluminum	mg/kg	ISO 22241-2 Annex I	---	0.5	---	0.65	0.06
Magnesium	mg/kg	ISO 22241-2 Annex I	---	0.5	---	0.65	0.01
Sodium	mg/kg	ISO 22241-2 Annex I	---	0.5	---	0.75	0.06
Potassium	mg/kg	ISO 22241-2 Annex I	---	0.5	---	0.75	0.08
Identity	---	ISO 22241-2 Annex J	Identical to reference		Identical to reference		Identical to reference
Notations:							

Supporting Graph:

