

Gage Products Company Certificate of Analysis / QC Results

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Date: 02/27/12 at 10:48 AM

Customer PO # :

Packaged Product: 41067 CSC 2012 Endurance Gasoline				
Property	Test Method	UOM	Specification	Value
SPECIFIC GRAVITY @ 60F	ASTM D4052		REPORT	0.7596
DISTILLATION, IBP	ASTM D86	DEG F	REPORT	90.0
DISTILLATION, 5%	ASTM D86	DEG F	REPORT	105.3
DISTILLATION, 10%	ASTM D86	DEG F	REPORT	120.2
DISTILLATION, 20%	ASTM D86	DEG F	REPORT	146.3
DISTILLATION, 30%	ASTM D86	DEG F	REPORT	159.4
DISTILLATION, 40%	ASTM D86	DEG F	REPORT	164.3
DISTILLATION, 50%	ASTM D86	DEG F	REPORT	166.5
DISTILLATION, 60%	ASTM D86	DEG F	REPORT	168.1
DISTILLATION, 70%	ASTM D86	DEG F	REPORT	169.5
DISTILLATION, 80%	ASTM D86	DEG F	REPORT	172.0
DISTILLATION, 90%	ASTM D86	DEG F	REPORT	271.6
DISTILLATION, 95%	ASTM D86	DEG F	REPORT	310.3
DISTILLATION, DP	ASTM D86	DEG F	REPORT	373.8
RECOVERY	ASTM D86	VOL. %	REPORT	96.3
RESIDUE	ASTM D86	VOL. %	REPORT	1.4
LOSS	ASTM D86	VOL. %	REPORT	2.3
RVP @ 100 DEG. F	ASTM D5191	PSI (KPA)	12.00 - 14.00(82.68 - 96.46)	12.44(85.71)
ETHANOL CONTENT	Gas Chromatography	VOL. %	34.00 - 36.00	35.30
Lot # 3818100 Made 02/07/12 In sealed unopened containers this product is good until 08/06/12 Approved By: <u>Robert Pettit</u>				

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Date: 02/27/12 at 10:46 AM

Customer PO # :

Packaged Product: 41068 CSC 2012 Emissions Fuel				
Property	Test Method	UOM	Specification	Value
SPECIFIC GRAVITY @ 60F	ASTM D4052		REPORT	0.7656
DISTILLATION, IBP	ASTM D86	DEG F	REPORT	97.4
DISTILLATION, 5%	ASTM D86	DEG F	REPORT	132.4
DISTILLATION, 10%	ASTM D86	DEG F	REPORT	143.9
DISTILLATION, 20%	ASTM D86	DEG F	REPORT	157.5
DISTILLATION, 30%	ASTM D86	DEG F	REPORT	162.7
DISTILLATION, 40%	ASTM D86	DEG F	REPORT	164.9
DISTILLATION, 50%	ASTM D86	DEG F	REPORT	166.5
DISTILLATION, 60%	ASTM D86	DEG F	REPORT	167.6
DISTILLATION, 70%	ASTM D86	DEG F	REPORT	169.4
DISTILLATION, 80%	ASTM D86	DEG F	REPORT	226.1
DISTILLATION, 90%	ASTM D86	DEG F	REPORT	263.5
DISTILLATION, 95%	ASTM D86	DEG F	REPORT	316.9
DISTILLATION, DP	ASTM D86	DEG F	REPORT	366.4
RECOVERY	ASTM D86	VOL. %	REPORT	97.3
RESIDUE	ASTM D86	VOL. %	REPORT	1.0
LOSS	ASTM D86	VOL. %	REPORT	1.9
RVP @ 100 DEG. F	ASTM D5191	PSI (KPA)	9.00 - 10.00(62.01 - 68.90)	9.60(66.14)
ETHANOL CONTENT	Gas Chromatography	VOL. %	34.00 - 36.00	34.98
CARBON CONTENT	ASTM D5291	WT. %	REPORT	74.15
HYDROGEN CONTENT	ASTM D5291	WT. %	REPORT	12.99
OXYGEN CONTENT	ASTM D5622	WT. %	REPORT	12.86
H/C RATIO	Calculated	MOLE/MOLE	REPORT	2.088
C/H RATIO	Calculated	WT/WT	REPORT	5.708
O/C RATIO	CALCULATED	MOLE/MOLE	REPORT	0.130
Lot # 3818400 Made 02/15/12 In sealed unopened containers this product is good until 08/06/12 Approved By: <u>Robert Patzelt</u>				

Gage Products Company Certificate of Analysis / QC Results

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Date: 02/27/12 at 10:47 AM

Customer PO # :

Packaged Product: 41069 CSC 2012 Diesel Fuel				
Property	Test Method	UOM	Specification	Value
SPECIFIC GRAVITY @ 60F	ASTM D4052		REPORT	0.8537
DISTILLATION, IBP	ASTM D86	DEG F	REPORT	388.2
DISTILLATION, 5%	ASTM D86	DEG F	REPORT	421.2
DISTILLATION, 10%	ASTM D86	DEG F	REPORT	436.5
DISTILLATION, 20%	ASTM D86	DEG F	REPORT	457.3
DISTILLATION, 30%	ASTM D86	DEG F	REPORT	480.6
DISTILLATION, 40%	ASTM D86	DEG F	REPORT	504.1
DISTILLATION, 50%	ASTM D86	DEG F	REPORT	520.7
DISTILLATION, 60%	ASTM D86	DEG F	REPORT	535.1
DISTILLATION, 70%	ASTM D86	DEG F	REPORT	553.6
DISTILLATION, 80%	ASTM D86	DEG F	REPORT	579.2
DISTILLATION, 90%	ASTM D86	DEG F	REPORT	611.4
DISTILLATION, 95%	ASTM D86	DEG F	REPORT	628.7
DISTILLATION, DP	ASTM D86	DEG F	REPORT	638.2
RECOVERY	ASTM D86	VOL. %	REPORT	97.9
RESIDUE	ASTM D86	VOL. %	REPORT	1.4
LOSS	ASTM D86	VOL. %	REPORT	0.7
SME BIODIESEL CONTENT	Gas Chromatography	VOL. %	6.50 - 7.50	7.03
CARBON CONTENT	ASTM D5291	WT. %	REPORT	86.29
HYDROGEN CONTENT	ASTM D5291	WT. %	REPORT	13.11
OXYGEN CONTENT	ASTM D5622	WT. %	REPORT	0.60
H/C RATIO	Calculated	MOLE/MOLE	REPORT	1.81
C/H RATIO	Calculated	WT/WT	REPORT	6.58
O/C RATIO	CALCULATED	MOLE/MOLE	REPORT	0.005
Lot # 3818700 Made 02/09/12 In sealed unopened containers this product is good until 08/06/12 Approved By: <u>Robert Patzelt</u>				