

**Gage Products Company**  
**Certificate of Analysis / QC Results**

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Date: 02/26/18 at 4:39 PM

Customer PO # :

<b>Packaged Product:</b> 42390 CSC 2018 Endurance Gasoline				
Property	Test Method	UOM	Specification	Value
SPECIFIC GRAVITY @ 60.0 F	ASTM D4052		REPORT	0.7384
DISTILLATION, IBP	ASTM D86	DEG F	REPORT	82.2
DISTILLATION, 10%	ASTM D86	DEG F	REPORT	106.8
DISTILLATION, 50%	ASTM D86	DEG F	REPORT	160.1
DISTILLATION, 90%	ASTM D86	DEG F	REPORT	340.4
DISTILLATION, DP	ASTM D86	DEG F	REPORT	383.1
RECOVERY	ASTM D86	VOL. %	REPORT	96.7
RESIDUE	ASTM D86	VOL. %	REPORT	1.0
LOSS	ASTM D86	VOL. %	REPORT	2.3
ETHANOL CONTENT	GAGE-GC2	VOL. %	19.00 - 21.00	20.04
RVP @ 100 F	ASTM D5191	PSI (KPA)	13.00 - 15.00(89.57 - 103.35)	13.99(96.39)
CARBON CONTENT	ASTM D5291	WT. %	REPORT	78.77
HYDROGEN CONTENT	ASTM D5291	WT. %	REPORT	13.75
OXYGEN CONTENT	ASTM D5622	WT. %	REPORT	7.48
H/C RATIO	GAGE-CALCULATED	MOLE/MOLE	REPORT	2.081
C/H RATIO	GAGE-CALCULATED	WT/WT	REPORT	5.727
O/C RATIO	GAGE-CALCULATED	MOLE/MOLE	REPORT	0.071
<b>Lot #</b> 11943100 <b>Made</b> 02/07/18 In sealed unopened containers this product is good until 02/07/20  <b>Approved By:</b> <u>Robert Patzelt</u>				

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Date: 02/26/18 at 4:40 PM

Customer PO # :

<b>Packaged Product:</b> 42391 CSC 2018 Emissions Gasoline				
Property	Test Method	UOM	Specification	Value
SPECIFIC GRAVITY @ 60.0 F	ASTM D4052		REPORT	0.7511
DISTILLATION, IBP	ASTM D86	DEG F	REPORT	92.6
DISTILLATION, 10%	ASTM D86	DEG F	REPORT	128.7
DISTILLATION, 50%	ASTM D86	DEG F	REPORT	162.3
DISTILLATION, 90%	ASTM D86	DEG F	REPORT	313.0
DISTILLATION, DP	ASTM D86	DEG F	REPORT	389.8
RECOVERY	ASTM D86	VOL. %	REPORT	97.9
RESIDUE	ASTM D86	VOL. %	REPORT	1.0
LOSS	ASTM D86	VOL. %	REPORT	1.1
ETHANOL CONTENT	GAGE-GC2	VOL. %	19.00 - 21.00	20.20
RVP @ 100 F	ASTM D5191	PSI (KPA)	8.50 - 10.00(58.57 - 68.90)	9.37(64.56)
CARBON CONTENT	ASTM D5291	WT. %	REPORT	79.05
HYDROGEN CONTENT	ASTM D5291	WT. %	REPORT	13.54
OXYGEN CONTENT	ASTM D5622	WT. %	REPORT	7.41
H/C RATIO	GAGE-CALCULATED	MOLE/MOLE	REPORT	2.041
C/H RATIO	GAGE-CALCULATED	WT/WT	REPORT	5.840
O/C RATIO	GAGE-CALCULATED	MOLE/MOLE	REPORT	0.070
<b>Lot #</b> 11943400 <b>Made</b> 02/08/18 In sealed unopened containers this product is good until 02/08/20  <b>Approved By:</b> <u>Robert Patzelt</u>				

**Gage Products Company**  
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Date: 02/26/18 at 4:42 PM

Customer PO # :

<b>Packaged Product:</b> 42392 CSC 2018 Diesel Fuel				
Property	Test Method	UOM	Specification	Value
SPECIFIC GRAVITY @ 60.0 F	ASTM D4052		REPORT	0.8542
DISTILLATION, IBP	ASTM D86	DEG F	REPORT	377.9
DISTILLATION, 10%	ASTM D86	DEG F	REPORT	435.1
DISTILLATION, 50%	ASTM D86	DEG F	REPORT	525.8
DISTILLATION, 90%	ASTM D86	DEG F	REPORT	613.5
DISTILLATION, DP	ASTM D86	DEG F	REPORT	637.2
RECOVERY	ASTM D86	VOL. %	REPORT	97.8
RESIDUE	ASTM D86	VOL. %	REPORT	1.4
LOSS	ASTM D86	VOL. %	REPORT	0.8
SME BIODIESEL CONTENT	GAGE-GC2	VOL. %	8.00 - 10.00	9.38
CARBON CONTENT	ASTM D5291	WT. %	REPORT	86.35
HYDROGEN CONTENT	ASTM D5291	WT. %	REPORT	12.58
H/C RATIO	GAGE-CALCULATED	MOLE/MOLE	REPORT	1.736
C/H RATIO	GAGE-CALCULATED	WT/WT	REPORT	6.866
O/C RATIO	GAGE-CALCULATED	MOLE/MOLE	REPORT	0.009
OXYGEN CONTENT	ASTM D4815	WT. %	REPORT	1.08
<p><b>Lot #</b> 11942800                      <b>Made</b> 02/07/18</p> <p>In sealed unopened containers this product is good until 02/07/20</p> <p><b>Approved By:</b> <u>Robert Patzelt</u></p>				