



GAGE PRODUCTS CO.  
821 WANDA AVENUE  
FERNDAL, MI 48220  
(248) 541-3824

ORIGINAL

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Date: 02/25/13 at 11:07 AM

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

**Customer: G00066 / Gage Internal Department**

**Sales Order # : 38404 Customer PO # : Shipped Qty : 275**

<b>Packaged Product:</b> 41088-55F CSC 2013 Endurance Gasoline				
Property	Test Method	UOM	Specification	Value
SPECIFIC GRAVITY @ 60F	ASTM D4052		REPORT	0.7671
DISTILLATION, IBP	ASTM D86	DEG F	REPORT	87.3
DISTILLATION, 10%	ASTM D86	DEG F	REPORT	127.8
DISTILLATION, 50%	ASTM D86	DEG F	REPORT	170.8
DISTILLATION, 90%	ASTM D86	DEG F	REPORT	174.0
DISTILLATION, DP	ASTM D86	DEG F	REPORT	341.8
RECOVERY	ASTM D86	VOL.%	REPORT	96.5
RESIDUE	ASTM D86	VOL.%	REPORT	1.4
LOSS	ASTM D86	VOL.%	REPORT	2.1
ETHANOL CONTENT	Gas Chromatography	VOL.%	65.00 - 67.00	65.75
RVP @ 100 DEG. F	ASTM D5191	PSI (KPA)	12.00 - 14.00(82.68 - 96.46)	13.65(94.05)
CARBON CONTENT	ASTM D5291	WT.%	REPORT	62.92
ROGEN CONTENT	ASTM D5291	WT.%	REPORT	13.43
OXYGEN CONTENT	ASTM D5622	WT.%	REPORT	23.65
H/C RATIO	Calculated	MOLE/MOLE	REPORT	2.543
C/H RATIO	Calculated	WT/WT	REPORT	4.686
O/C RATIO	CALCULATED	MOLE/MOLE	REPORT	0.282
<b>Lot #</b> 5164000 <b>Made</b> 02/20/13				
In sealed unopened containers this product is good until 02/06/14				
Approved By: <u>Robert Petzelt</u>				

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Customer: G00066 / Gage Internal Department

Sales Order #: 38404 Customer PO #: Shipped Qty : 55

<b>Packaged Product:</b> 41089-55F CSC 2013 Emissions Gasoline				
Property	Test Method	UOM	Specification	Value
SPECIFIC GRAVITY @ 60F	ASTM D4052		REPORT	0.7719
DISTILLATION, IBP	ASTM D86	DEG F	REPORT	94.1
DISTILLATION, 10%	ASTM D86	DEG F	REPORT	138.7
DISTILLATION, 50%	ASTM D86	DEG F	REPORT	170.5
DISTILLATION, 90%	ASTM D86	DEG F	REPORT	174.5
DISTILLATION, DP	ASTM D86	DEG F	REPORT	341.9
RECOVERY	ASTM D86	VOL.%	REPORT	96.3
RESIDUE	ASTM D86	VOL.%	REPORT	0.9
LOSS	ASTM D86	VOL.%		2.8
ETHANOL CONTENT	Gas Chromatography	VOL.%	65.00 - 67.00	65.52
RVP @ 100 DEG. F	ASTM D5191	PSI (KPA)	9.00 - 10.00(62.01 - 68.90)	9.79(67.45)
CARBON CONTENT	ASTM D5291	WT.%	REPORT	63.30
ROGEN CONTENT	ASTM D5291	WT.%	REPORT	13.31
OXYGEN CONTENT	ASTM D5622	WT.%	REPORT	23.39
H/C RATIO	Calculated	MOLE/MOLE	REPORT	2.505
C/H RATIO	Calculated	WT/WT	REPORT	4.757
O/C RATIO	CALCULATED	MOLE/MOLE	REPORT	0.277
<b>Lot #</b> 5164300 <b>Made</b> 02/21/13				
In sealed unopened containers this product is good until 02/06/14				
Approved By: <u>Robert Patzelt</u>				

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Customer: G00066 / Gage Internal Department

Sales Order # : 38404 Customer PO # : Shipped Qty : 10

<b>Packaged Product:</b> 41090-5C CSC 2013 Diesel Fuel				
Property	Test Method	UOM	Specification	Value
SPECIFIC GRAVITY @ 60F	ASTM D4052		REPORT	0.8534
DISTILLATION, IBP	ASTM D86	DEG F	REPORT	374.9
DISTILLATION, 10%	ASTM D86	DEG F	REPORT	429.3
DISTILLATION, 50%	ASTM D86	DEG F	REPORT	517.8
DISTILLATION, 90%	ASTM D86	DEG F	REPORT	605.8
DISTILLATION, DP	ASTM D86	DEG F	REPORT	638.0
RECOVERY	ASTM D86	VOL. %	REPORT	98.3
RESIDUE	ASTM D86	VOL. %	REPORT	1.4
LOSS	ASTM D86	VOL. %	REPORT	0.3
SME BIODIESEL CONTENT	Gas Chromatography	VOL. %	5.50 - 6.50	5.95
CARBON CONTENT	ASTM D5291	WT. %	REPORT	86.24
HYDROGEN CONTENT	ASTM D5291	WT. %	REPORT	13.76
GEN CONTENT	ASTM D5622	WT. %	REPORT	0
H/C RATIO	Calculated	MOLE/MOLE	REPORT	1.902
C/H RATIO	Calculated	WT/WT	REPORT	6.265
O/C RATIO	CALCULATED	MOLE/MOLE	REPORT	0
<b>Lot #</b> 5164700 <b>Made</b> 02/13/13				
In sealed unopened containers this product is good until 02/06/14				
Approved By: <u>Robert Patzelt</u>				

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