

**General Motors Engine Oil Aeration Test for Gen2 dexos ®**

Form 1

Version

Conducted For

	V = Valid
	I = Invalid
	N = Results cannot be interpreted as representative of oil performance (Non-reference oil) and shall not be used for multiple test acceptance

<b>Test Number</b>					
Stand		Engine		Engine Runs	
Test Number					
Oil Code					
Formulation/Stand Code					
SAE Viscosity Grade					
Alternate Codes					
Date Started			Time Started		
Date Completed			Time Completed		
Test Length			Total Downtime		

In my opinion this test _____ been conducted in a valid manner in accordance with test procedure GMAER and appropriate amendments. The remarks included in the report describe the anomalies associated with this test.
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Submitted By: \_\_\_\_\_  
Testing Laboratory

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Typed Name

\_\_\_\_\_  
Title

**General Motors Engine Oil Aeration Test for Gen2 dexos ®**

Form 2

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**General Motors Engine Oil Aeration Test for Gen2 dexos ®**

Form 3

**Test Summary**

Test Number	
Formulation Stand Code	

Test Info			
Engine Number		Engine Hours @ SOT	
Engine Run #		Labs Runs	
Oil Weight SOT		Fuel Batch ID	
Oil Weight EOT			
Total Oil Consumption (g)			

Test Results: Extracted Aeration Readings from Aeration vs. Time Curve at 100 kPa (abs)	
	Result
0.5 - 1 Hour Average Aeration %	
4-5 Hour Average Aeration %	
19-20 Hour Average Aeration %	
28-29 Hour Average Hour Aeration %	
Maximum Micromotion Aeration %	
Oil Density at 160 kPa by Micromotion, g/mL	

Post Test Pressure Sweep	
Pressure, kPa(Abs)	Average Aeration % (last 5 minutes)
84	
140	
160	

Last GM-AER1 Reference Oil Test Results for Specification Assessment: Aeration vs. Time Curve at 100 kPa (abs)	
	Result
0.5 - Hour Average Aeration %	
4-5 Hour Average Aeration %	
19-20 Hour Average Aeration %	
28-29 Hour Average Aeration %	
Maximum Micromotion Aeration	
Oil Density at 160 kPa by Micromotion, g/mL	

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Form 4  
**Operational Summary**

Test Number	
Formulation Stand Code	

		Operational Summary									
		Parameter	Units	Target	Average	SD	Min	Max	QI	Samples	BQD
<b>Controlled Parameters</b>		Speed	r/min	3000							
		Torque	Nm	150							
		Coolant Out Temp	°C	100							
		Oil Gallery Temp	°C	110							
		Sample Oil Flow	L/min	1.5							
		Sample Oil Pressure	kPaA	100							
		Crankcase Pressure	kPaA	100							
<b>Uncontrolled Parameters</b>		Power	kW	Record							
		Coolant In Temp	°C	Record							
		Intake Air Temp, Engine	°C	Record							
		Oil Sump Temp	°C	Record							
		Fuel Temp at Rail	°C	Record							
		Ambient Temp	°C	Record							
		Right Side Exhaust Temp	°C	Record							
		Left Side Exhaust Temp	°C	Record							
		Intake Manifold Air Pressure	kPaA	Record							
		Oil Gallery Pressure	kPaG	Record							
		Fuel Pressure	kPaG	Record							
		Pressure Ambient	kPaA	Record							
		Exhaust back Pressure	kPaG	Record							
		Oil Temp In to Micromotion	°C	Record							
		Oil Temp Out of Micromotion	°C	Record							
	Sample Oil Temperature	°C	Record								

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Form 5

**Oil Analysis**

Test Number	
Formulation Stand Code	

<b>ICP (ppm)</b>		
<b>Element</b>	<b>New</b>	<b>30 Hrs</b>
Aluminum (Al)		
Copper (Cu)		
Iron (Fe)		
Silicon (Si)		

	<b>New</b>	<b>30 Hrs</b>
Viscosity at 100 °C (cSt)		

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Form 6

**Aeration Plot**

Test Number	
Formulation Stand Code	

**General Motors Engine Oil Aeration Test for Gen2 dexos®**

Form 7

**Downtime Summary**

Test Number	
Formulation Stand Code	

Number of Downtime Occurrences			
Test Hours	Date	Downtime	Reasons
			<b>Total Downtime (hours)</b>

