

Certification Summary Information Report

Manufacturer	Mazda Motor Corporation	Manufacturer Code	TKX
Test Group	ETKXV02.55NN	Evaporative/Refueling Family	ETKXR0111GAK
Certificate Number	N/A	CARB Executive Order #	N/A
Certificate Issue Date	N/A	Certificate Revision Date	N/A
Certificate Effective Date	N/A	Conditional Certificate	--
CSI Revision #	0	CSI Submission/Revision Date	05/31/2013
Model Year	2014		

Test Group Information

CSI Type	Update for Correction	Running Change Reference Number	N/A
GHG Exempt Status	Not Exempt		

Drive Sources and Fuel(s)

Drive Source #1: Combustion Engine

Fuel	Basic Fuel Metering System	Lean Burn Strategy Indicator
Gasoline	Spark Ignition Direct fuel injection	N

Hybrid Indicator	No	Rechargeable Energy Storage System Indicator	--
Multiple Fuel Storage	--	Off-board Charge Capable Indicator	--
Multiple Fuel Combustion	--	EPA Vehicle Class	LDV
Fuel Cell Indicator	--	Federal Clean Fuel Vehicle Standard	--
Federal Clean Fuel Vehicle	No	California Partial Zero Emissions Vehicle Indicator	No
Federal Clean Fuel Vehicle ILEV	No	Durability Group Equivalency Factor	0.6
Durability Group Name	ETKXGPGNND7	Certification Region Code(s)	FA
Reduced Fee Test Group	No		
Complies with HD GHG 2b/3 regulations?	No		
Introduction into Commerce Date	06/25/2013	CAP2000 Conditional Certificate?	N/A
Independent Commercial Importer?	--	Alternative Fuel Converter Certificate?	--
SFTP Compliance Indicator	Yes	SFTP Composite CO Option	Yes
OBD Compliance Type	CARB	OBD Demonstration Vehicle Test Group	ETKXV02.5NC2
Mfr Test Group Comments	Durability group equivalency factor = ABC/SRC.		
Mfr Exhaust / Evap Standards Comments	--		

Certification Summary Information Report

Test Group	ETKXV02.55NN		Evaporative/Refueling Family	ETKXR0111GAK			
Evaporative/Refueling Family Information							
Evaporative Summary Information Type	New	Submission/Correction Date	05/10/2013				
Integrated ORVR?	Yes	Fuel(s)	Gasoline				
Multiple Fuel Storage	--						
Bladder Fuel Tank?	No						
Fuel Tank Material	Metal	Fuel Tank Material Description	Steel				
Fill Pipe Seal Type	Liquid seal						
Air Intake System Vapor Storage Device?	No	Air Intake System Vapor Storage Device Description	N/A				
Fuel System Vapor Storage Canister?	Yes	Other Vapor Storage	N/A				
Fuel System Vapor Storage Canister(s) Total Working Capacity (grams)	111	Number of Primary Canisters	1				
Number of Bleed Canisters	0	Bleed Canister Total Working Capacity (grams)	N/A				
Mfr Evaporative/Refueling Family Comments	--						
Models Covered by this Certificate							
Carline Manufacturer	Division	Carline	Certification Region Code(s)	Drive System	Trans - Type	- # of Gears	Trans - Lockup
Mazda Motor Corporation	1 - MAZDA	37 - MAZDA3 4-Door	Federal	2-Wheel Drive, Front	Semi-Automatic	6	Yes
Mazda Motor Corporation	1 - MAZDA	38 - MAZDA3 5-Door	Federal	2-Wheel Drive, Front	Semi-Automatic	6	Yes
Engine Description							
Hybrid Type	--	Hybrid Description	--				
Engine Type	4-Stroke Spark Ignition	Mfr Engine Description	--				
Engine Block Arrangement	Inline	Mfr Engine Block Arrangement Description	--				
Camless Valvetrain Indicator	No	Oil Viscosity/Classification	GF-5 0W-20				
Number of Cylinders/Rotors	4						
After Treatment Device(s) (ATD)							
ATD Number	ATD Type	ATD Precious Metal	Substrate Material	Substrate Construction			
1	Three-way catalyst	Paladium + Rhodium	Ceramic	Monolith			
2	Three-way catalyst	Platinum + Rhodium	Ceramic	Monolith			
Mfr After Treatment Device (ATD) Comments							
--							
Direct Ozone Reduction (DOR) Device	Not Equipped						
Mfr Emission Control Device Comments	--						

Certification Summary Information Report

Test Group	ETKXV02.55NN	Evaporative/Refueling Family	ETKXR0111GAK
Engine Configuration Number 1			
Engine Displacement (liters)	2.5	Engine Rated Horsepower	184
Number of Inlet Valves Per Cylinder	2	Number of Exhaust Valves Per Cylinder	2
Air Aspiration Method	Naturally Aspirated	Number of Air Aspiration Devices	N/A
Air Aspiration Device Configuration	--	Charge Air Cooler Type	N/A
Cylinder Deactivation Description	N/A		
	This technology optimizes the valve timing by using computer control to continuously switch the intake and exhaust valve opening/closing timing according to driving conditions.		
Variable Valve Timing System Description		Variable Valve Lift System	N/A
Number of Knock Sensors	1		
Air/Fuel Sensor # 1 Type	Heated oxygen	Air/Fuel Sensor # 1 Description	N/A
Air/Fuel Sensor # 2 Type	Heated air fuel	Air/Fuel Sensor # 2 Description	N/A
Mfr Air/Fuel Sensor Comments	--		
Exhaust Gas Recirculation	No	EGR Type	--
Cooled Exhaust Gas Recirculation	No		
Closed Loop Air Injection System	No	Air Injection Type	--
Mfr Engine Configuration Comments	--		

Official Test Numbers

Test Group	Fuel	FTP	US06	SC03	Cold CO	Highway	EPA City	EPA City	EPA	EPA	CREE
							Litmus Value	Litmus Threshold	Highway Litmus Value	Highway Litmus Threshold	
Gasoline		ETKX10025234	ETKX10025238	ETKX10025237	ETKX10025236	ETKX10025235	24.1	23	33.8	30	N/A

Certification Summary Information Report

Test Group	ETKXV02.55NN	Evaporative/Refueling Family	ETKXR0111GAK						
Emission Data Vehicle Information									
Vehicle ID / Configuration	4EFPY31-004 / 2								
Vehicle Model									
Represented Test Vehicle Make	MAZDA	Represented Test Vehicle Model	MAZDA6						
Drive Sources and Fuel System Details									
	<table border="1"> <thead> <tr> <th>Drive Source and Fuel#</th> <th>Drive Source</th> <th>Fuel</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Combustion Engine</td> <td>Gasoline</td> </tr> </tbody> </table>			Drive Source and Fuel#	Drive Source	Fuel	1	Combustion Engine	Gasoline
Drive Source and Fuel#	Drive Source	Fuel							
1	Combustion Engine	Gasoline							
Hybrid Indicator	N	Multiple Fuel Combustion	--						
Multiple Fuel Storage	--	Rechargeable Energy Storage System Indicator	--						
Fuel Cell Indicator	--	Rechargeable Energy Storage System, if 'Other'	--						
Rechargeable Energy Storage System	--								
Off-board charge Capable Indicator	--								
Transmission Type	Manual	# of Transmission Gears	6						
Engine Code	4PY3AAM	Axle Ratio	4.1						
Displacement (liters)	2.5	Rated Horsepower	184						
Equivalent Test Weight (pounds)	3500	Air Aspiration Method	Naturally Aspirated						
Drive Mode While Testing	2-Wheel Drive, Front	SIL Usage	Not equipped						
Aged Emission Components	4,000 (mi)								
Dynamometer Coefficients:									
	Target Coefficients			Set Coefficients			EPA Calculated Total Road Load Horse Power for City/Highway/Evap Coefficients		
Coefficient Category	A (lbf)	B (lbf/mph)	C (lbf/mph**2)	A (lbf)	B (lbf/mph)	C (lbf/mph**2)			
City/Highway/Evap	20.865	0.33778	0.015839	4.233	0.18875	0.01597	10.3		
Cold CO	22.951	0.37155	0.017422	2.637	-0.08922	0.019978	N/A		
US06	20.865	0.33778	0.015839	4.233	0.18875	0.01597	N/A		
Manufacturer Test Vehicle Comments	14MY MAZDA6 2.5L M6 FEDERAL P225/45R19 2 EM.								

Certification Summary Information Report

Test Group	ETKXV02.55NN		Evaporative/Refueling Family	ETKXR0111GAK				
Test #	ETKX10022979		Test Procedure	38 - CA fuel 3-day evap.				
Exhaust Test # for this Evap Test	ETKX10022978		Test Fuel Type	23 - CARB Phase II Gasoline				
Test Date	09/04/2012		Fuel	Gasoline				
Vehicle Class	N/A		DF Type	Mfr. Determined				
Verify Test Lab ID	MIYOSHI PROVING GROUND							
Test Results								
Test Result Name			Unrounded Test Result		Verify Calculated FE MPG Equivalent Value			
Total Hydrocarbon			0.155		--			
Manufacturer Test Comments								
14MY MAZDA6 2.5L M6 FEDERAL P225/45R19 2 EVAP EM								
Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	Add DF	Certification Level	Standard	Pass/Fail
Fed	120,000 miles	Federal LEV-II Evap	HC-TOTAL	0.155	0.003	0.16	0.5	Pass
Test #	ETKX91001600		Test Procedure	27 - California fuel 2-day evap				
Exhaust Test # for this Evap Test	ETKX91001596		Test Fuel Type	23 - CARB Phase II Gasoline				
Test Date	11/16/2012		Fuel	Gasoline				
Vehicle Class	N/A		DF Type	Mfr. Determined				
Verify Test Lab ID	--							
Test Results								
Test Result Name			Unrounded Test Result		Verify Calculated FE MPG Equivalent Value			
Total Hydrocarbon			0.1219306		--			
Manufacturer Test Comments								
Hot_Soak_HC_(g) = 0.010487, Diurnal (gHC) = 0.111444								
Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	Add DF	Certification Level	Standard	Pass/Fail
Fed	120,000 miles	Federal LEV-II Evap	HC-TOTAL	0.122	0.003	0.12	0.65	Pass

Certification Summary Information Report

Test Group	ETKXV02.55NN	Evaporative/Refueling Family	ETKXR0111GAK
Test #	ETKX10022980	Test Procedure	37 - California Fuel Running Loss
Exhaust Test # for this Evap Test	ETKX10022978	Test Fuel Type	23 - CARB Phase II Gasoline
Test Date	09/04/2012	Fuel	Gasoline
Vehicle Class	N/A	DF Type	Mfr. Determined
Verify Test Lab ID	MIYOSHI PROVING GROUND		

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE MPG Equivalent Value
Hydrocarbon for Running Loss and ORVR	0	--

Manufacturer Test Comments 14MY MAZDA6 2.5L M6 FEDERAL P225/45R19 2 Running Loss EM

Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	Add DF	Certification Level	Standard	Pass/Fail
Fed	120,000 miles	Federal LEV-II Evap	HC	0	0	0	0.05	Pass

Test #	ETKX10022981	Test Procedure	24 - Federal fuel refueling test (ORVR)
Exhaust Test # for this Evap Test	ETKX10022978	Test Fuel Type	61 - Tier 2 Cert Gasoline
Test Date	08/24/2012	Fuel	Gasoline
Vehicle Class	N/A	DF Type	Mfr. Determined
Verify Test Lab ID	MIYOSHI PROVING GROUND		

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE MPG Equivalent Value
Hydrocarbon for Running Loss and ORVR	0.008	--

Manufacturer Test Comments 14MY MAZDA6 2.5L M6 FEDERAL P225/45R19 2 ORVR EM

Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	Add DF	Certification Level	Standard	Pass/Fail
Fed	120,000 miles	Federal LEV-II Evap	HC	0.008	0.004	0.01	0.2	Pass

Certification Summary Information Report

Test Group	ETKXV02.55NN		Evaporative/Refueling Family	ETKXR0111GAK							
Emission Data Vehicle Information											
Vehicle ID / Configuration	4EFPYS1-006 / 2										
Vehicle Model											
Represented Test Vehicle Make	MAZDA		Represented Test Vehicle Model	MAZDA6							
Drive Sources and Fuel System Details											
	<table border="1"> <thead> <tr> <th>Drive Source and Fuel#</th> <th>Drive Source</th> <th>Fuel</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Combustion Engine</td> <td>Gasoline</td> </tr> </tbody> </table>		Drive Source and Fuel#	Drive Source	Fuel	1	Combustion Engine	Gasoline			
Drive Source and Fuel#	Drive Source	Fuel									
1	Combustion Engine	Gasoline									
Hybrid Indicator	N		Multiple Fuel Combustion	--							
Multiple Fuel Storage	--		Rechargeable Energy Storage System Indicator	--							
Fuel Cell Indicator	--		Rechargeable Energy Storage System, if 'Other'	--							
Rechargeable Energy Storage System	--										
Off-board charge Capable Indicator	--										
Transmission Type	Semi-Automatic		# of Transmission Gears	6							
Engine Code	4PYSAAN		Axle Ratio	3.59							
Displacement (liters)	2.5		Rated Horsepower	184							
Equivalent Test Weight (pounds)	3500		Air Aspiration Method	Naturally Aspirated							
Drive Mode While Testing	2-Wheel Drive, Front		SIL Usage	Not equipped							
Aged Emission Components	4,000 (mi)										
Dynamometer Coefficients:											
	Target Coefficients			Set Coefficients							
Coefficient Category	A (lbf)	B (lbf/mph)	C (lbf/mph**2)	A (lbf)	B (lbf/mph)	C (lbf/mph**2)	EPA Calculated Total Road Load Horse Power for City/Highway/Evap Coefficients				
City/Highway/Evap	27.144	0.1385	0.017219	8.804	-0.13264	0.018494	10.3				
Cold CO	29.858	0.15235	0.01894	7.408	-0.1728	0.020367	N/A				
US06	27.144	0.1385	0.017219	8.804	-0.13264	0.018494	N/A				
Manufacturer Test Vehicle Comments											
14MY MAZDA6 2.5L S6 With Regenerative braking system T2B5/ULEV2 P225/45R19 Automatic-mode & Sports-mode 2 EM. Engine Code: Federal:4PYSAAN, California:4PYSAB2. Please use the sports mode during all the emission tests. After engine starting, press the sport mode switch in the center console and make sure the indicator light (SPORT) illuminates in the speed meter. Please note that the sports mode will be turned off automatically when the ignition switch is turned off. Canister Loading Procedure: In order to avoid interfering with canister loading from OBD evaporative system monitoring, a canister must be loaded at least 60 minutes after engine key off.											

Certification Summary Information Report

Test Group	ETKXV02.55NN	Evaporative/Refueling Family	ETKXR0111GAK
Test #	ETKX10025234	Test Procedure	21 - Federal fuel 2-day exhaust (w/can load)
Exhaust Test # for this Evap Test	N/A	Test Fuel Type	61 - Tier 2 Cert Gasoline
Test Date	03/22/2013	Fuel	Gasoline
Vehicle Class	LDV/Passenger Car	DF Type	Mfr. Determined
Verify Test Lab ID	MIYOSHI PROVING GROUND		

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE MPG Equivalent Value
Bag 1 Carbon Dioxide	313	--
Bag 1 Fuel Economy	28.2	28.2
Bag 2 Carbon Dioxide	294	--
Bag 2 Fuel Economy	30.1	30.1
Bag 3 Carbon Dioxide	258	--
Bag 3 Fuel Economy	34.3	34.3
CH4 - Methane	0.0052	--
Carbon Monoxide	0.15	--
Manufacturer Fuel Economy	30.7	30.7
Nitrogen Oxide	0.011	--
Nitrous Oxide	0.01	--
Non-methane Hydrocarbon	0.0083	--
Non-methane organic gas (California)	0.0087	--
Total Hydrocarbon	0.013	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Optional Carbon-Related Exhaust Emissions	291.3719178	291

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	288	288

Manufacturer Test Comments

14MY MAZDA6 2.5L S6 With Regenerative braking system T2B5/ULEV2 P225/45R19 Automatic-mode & Sports-mode 2 EM FTP

Certification Summary Information Report

Test Group		ETKXV02.55NN			Evaporative/Refueling Family				ETKXR0111GAK			
Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	RAF	NMOG/NM HC Ratio	Diesel Adjustment Factor	Add DF	Mult DF	Certification Level	Standard	Pass/Fail
Fed	50,000 miles	Federal Tier 2 Bin 5	CO	0.15	--	--	--	0.01	--	0.2	3.4	Pass
Fed	50,000 miles	Federal Tier 2 Bin 5	NMOG	0.0087	--	1.04	--	0.0017	--	0.01	0.075	Pass
Fed	50,000 miles	Federal Tier 2 Bin 5	NOX	0.011	--	--	--	0	--	0.01	0.05	Pass
Fed	120,000 miles	Federal Tier 2 Bin 5	CO	0.15	--	--	--	0.03	--	0.2	4.2	Pass
Fed	120,000 miles	Federal Tier 2 Bin 5	CO-COMP	0.26	--	--	--	0.03	--	0.3	4.2	Pass
Fed	120,000 miles	Federal Tier 2 Bin 5	HC-NM+NOX-COMP	0.032	--	--	--	0.005	--	0.03	0.65	Pass
Fed	120,000 miles	Federal Tier 2 Bin 5	NMOG	0.0087	--	1.04	--	0.0042	--	0.013	0.090	Pass
Fed	120,000 miles	Federal Tier 2 Bin 5	NOX	0.011	--	--	--	0.001	--	0.01	0.07	Pass
Fed	120,000 miles	Federal Tier 2 Bin 5	OPT-CREE	291	--	--	--	0.4	--	291	--	--

NOTE: For Non-charge depleting tests, the Rounded Result for CREE/OPT-CREE Emission names are Verify-calculated values.

Certification Summary Information Report

Test Group	ETKXV02.55NN	Evaporative/Refueling Family	ETKXR0111GAK
Test #	ETKX10025236	Test Procedure	11 - Cold CO
Exhaust Test # for this Evap Test	N/A	Test Fuel Type	26 - Cold CO Regular (Tier 2)
Test Date	03/29/2013	Fuel	Gasoline
Vehicle Class	LDV/Passenger Car	DF Type	Mfr. Determined
Verify Test Lab ID	MIYOSHI PROVING GROUND		

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE MPG Equivalent Value
Bag 1 Carbon Dioxide	410	--
Bag 1 Fuel Economy	21.4	21.4
Bag 2 Carbon Dioxide	319	--
Bag 2 Fuel Economy	27.8	27.8
Bag 3 Carbon Dioxide	270	--
Bag 3 Fuel Economy	32.9	32.9
CH4 - Methane	0.0124	--
Carbon Monoxide	0.49	--
Manufacturer Fuel Economy	27.3	27.3
Nitrogen Oxide	0.011	--
Non-methane Hydrocarbon	0.0774	--
Non-methane organic gas (California)	0.0805	--
Total Hydrocarbon	0.089	--

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	324	--

Manufacturer Test Comments 14MY MAZDA6 2.5L S6 With Regenerative braking system T2B5/ULEV2 P225/45R19 Automatic-mode & Sports-mode 2 EM COLDCO

Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	RAF	NMOG/NM HC Ratio	Diesel Adjustment Factor	Add DF	Mult DF	Certification Level	Standard	Pass/Fail
Fed	50,000 miles	Federal Tier 2 Bin 5	CO	0.49	--	--	--	0.01	--	0.5	10.0	Pass
Fed	120,000 miles	Federal Tier 2 Bin 5	HC-NM	0.08	--	--	--	0	--	0.1	0.2	Pass

Certification Summary Information Report

Test Group	ETKXV02.55NN	Evaporative/Refueling Family	ETKXR0111GAK
Test #	ETKX10025235	Test Procedure	3 - HWFE
Exhaust Test # for this Evap Test	N/A	Test Fuel Type	61 - Tier 2 Cert Gasoline
Test Date	03/22/2013	Fuel	Gasoline
Vehicle Class	LDV/Passenger Car	DF Type	Mfr. Determined
Verify Test Lab ID	MIYOSHI PROVING GROUND		

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE MPG Equivalent Value
CH4 - Methane	0.005	--
Carbon Monoxide	0.02	--
Manufacturer Fuel Economy	44.5	44.5
Nitrogen Oxide	0.004	--
Nitrous Oxide	0.01	--
Non-methane Hydrocarbon	0.0055	--
Non-methane organic gas (California)	0.0058	--
Total Hydrocarbon	0.011	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Optional Carbon-Related Exhaust Emissions	202.1538264	202

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	199	199

Manufacturer Test Comments 14MY MAZDA6 2.5L S6 With Regenerative braking system T2B5/ULEV2 P225/45R19 Automatic-mode & Sports-mode 2 EM HWY

Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	RAF	NMOG/NM HC Ratio	Diesel Adjustment Factor	Add DF	Mult DF	Certification Level	Standard	Pass/Fail
Fed	50,000 miles	Federal Tier 2 Bin 5	NOX	0.004	--	--	--	0	--	0	0.07	Pass
Fed	120,000 miles	Federal Tier 2 Bin 5	NOX	0.004	--	--	--	0.001	--	0	0.09	Pass
Fed	120,000 miles	Federal Tier 2 Bin 5	OPT-CREE	202	--	--	--	0.4	--	202	--	--

NOTE: For Non-charge depleting tests, the Rounded Result for CREE/OPT-CREE Emission names are Verify-calculated values.

Certification Summary Information Report

Test Group	ETKXV02.55NN	Evaporative/Refueling Family	ETKXR0111GAK
Test #	ETKX10025238	Test Procedure	90 - US06
Exhaust Test # for this Evap Test	N/A	Test Fuel Type	61 - Tier 2 Cert Gasoline
Test Date	03/22/2013	Fuel	Gasoline
Vehicle Class	LDV/Passenger Car	DF Type	Mfr. Determined
Verify Test Lab ID	MIYOSHI PROVING GROUND		

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE MPG Equivalent Value
Bag 1 Carbon Dioxide	412	--
Bag 1 Fuel Economy	21.5	21.5
Bag 2 Carbon Dioxide	236	--
Bag 2 Fuel Economy	37.5	37.5
CH4 - Methane	0.0058	--
Carbon Monoxide	0.22	--
Manufacturer Fuel Economy	32.2	32.2
Nitrogen Oxide	0.013	--
Non-methane Hydrocarbon	0.0125	--
Non-methane organic gas (California)	0.013	--
SFTP Non-methane Hydrocarbon + Nitrogen Oxides for US06 or SC03	0.026	--
Total Hydrocarbon	0.018	--

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	275	--

Manufacturer Test Comments

14MY MAZDA6 2.5L S6 With Regenerative braking system T2B5/ULEV2 P225/45R19 Automatic-mode & Sports-mode 2 EM US06

Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	RAF	NMOG/NM HC Ratio	Diesel Adjustment Factor	Add DF	Mult DF	Certification Level	Standard	Pass/Fail
Fed	4,000 miles	Federal Tier 2 Bin 5	CO	0.22	--	--	--	--	--	0.2	8.0	Pass
Fed	4,000 miles	Federal Tier 2 Bin 5	HC-NM+NOX	0.026	--	--	--	--	--	0.03	0.14	Pass

Certification Summary Information Report

Test Group	ETKXV02.55NN	Evaporative/Refueling Family	ETKXR0111GAK
Test #	ETKX10025237	Test Procedure	95 - SC03
Exhaust Test # for this Evap Test	N/A	Test Fuel Type	61 - Tier 2 Cert Gasoline
Test Date	04/10/2013	Fuel	Gasoline
Vehicle Class	LDV/Passenger Car	DF Type	Mfr. Determined
Verify Test Lab ID	ETL-4 (Hiroshima)		

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE MPG Equivalent Value
CH4 - Methane	0.0108	--
Carbon Monoxide	0.32	--
Manufacturer Fuel Economy	22.7	22.7
Nitrogen Oxide	0.019	--
Non-methane Hydrocarbon	0.0164	--
Non-methane organic gas (California)	0.0164	--
SFTP Non-methane Hydrocarbon + Nitrogen Oxides for US06 or SC03	0.035	--
Total Hydrocarbon	0.027	--

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	390	--

Manufacturer Test Comments

14MY MAZDA6 2.5L S6 With Regenerative braking system T2B5/ULEV2 P225/45R19 Automatic-mode & Sports-mode 2 EM SC03

Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	RAF	NMOG/NM HC Ratio	Diesel Adjustment Factor	Add DF	Mult DF	Certification Level	Standard	Pass/Fail
Fed	4,000 miles	Federal Tier 2 Bin 5	CO	0.32	--	--	--	--	--	0.3	2.7	Pass
Fed	4,000 miles	Federal Tier 2 Bin 5	HC-NM+NOX	0.035	--	--	--	--	--	0.04	0.20	Pass

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Test Group		ETKXV02.55NN			Evaporative/Refueling Family			ETKXR0111GAK		
Consolidated List of Standards										
Exhaust Standards										
Cert Region		Federal			Cert/In-Use Code			Both		
Vehicle Class		LDV/Passenger Car			Standard Level			Federal Tier 2 Bin 5		
Fuel		Gasoline			Test Procedure			Federal fuel 2-day exhaust (w/can load)		
Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std	
50,000 miles	CO	--	--	--	--	--	--	0.01	3.4	
50,000 miles	NMOG	--	--	1.04	--	--	--	0.0017	0.075	
50,000 miles	NOX	--	--	--	--	--	--	0	0.05	
120,000 miles	CO	--	--	--	--	--	--	0.03	4.2	
120,000 miles	CO-COMP	--	--	--	--	--	--	0.03	4.2	
120,000 miles	HC-NM+NOX-COMP	--	--	--	--	--	--	0.005	0.65	
120,000 miles	NMOG	--	--	1.04	--	--	--	0.0042	0.090	
120,000 miles	NOX	--	--	--	--	--	--	0.001	0.07	
120,000 miles	OPT-CREE	--	--	--	--	--	--	0.4	999.9999	
Cert Region		Federal			Cert/In-Use Code			Both		
Vehicle Class		LDV/Passenger Car			Standard Level			Federal Tier 2 Bin 5		
Fuel		Gasoline			Test Procedure			HWFE		
Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std	
50,000 miles	NOX	--	--	--	--	--	--	0	0.07	
120,000 miles	NOX	--	--	--	--	--	--	0.001	0.09	
120,000 miles	OPT-CREE	--	--	--	--	--	--	0.4	999.9999	
Cert Region		Federal			Cert/In-Use Code			Both		
Vehicle Class		LDV/Passenger Car			Standard Level			Federal Tier 2 Bin 5		
Fuel		Gasoline			Test Procedure			SC03		
Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std	
4,000 miles	CO	--	--	--	--	--	--	--	2.7	
4,000 miles	HC-NM+NOX	--	--	--	--	--	--	--	0.20	

Certification Summary Information Report

Test Group	ETKXV02.55NN		Evaporative/Refueling Family			ETKXR0111GAK			
Cert Region	Federal		Cert/In-Use Code			Both			
Vehicle Class	LDV/Passenger Car		Standard Level			Federal Tier 2 Bin 5			
Fuel	Gasoline		Test Procedure			Cold CO			
Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std
50,000 miles	CO	--	--	--	--	--	--	0.01	10.0
120,000 miles	HC-NM	--	--	--	--	--	--	0	0.2

Cert Region	Federal		Cert/In-Use Code			Both			
Vehicle Class	LDV/Passenger Car		Standard Level			Federal Tier 2 Bin 5			
Fuel	Gasoline		Test Procedure			US06			
Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std
4,000 miles	CO	--	--	--	--	--	--	--	8.0
4,000 miles	HC-NM+NOX	--	--	--	--	--	--	--	0.14

Evaporative/Refueling Standards

Evaporative/Refueling Family	ETKXR0111GAK		Cert Region			Federal			
Cert/In-Use Code	Both		Standard Level			Federal LEV-II Evap			
Test Procedure	Federal fuel refueling test (ORVR)								
Fuel	Useful Life	Emission Name	Rounded Result			Std	Add DF		
Gasoline	120,000 miles	HC	--			0.2	0.004		

Evaporative/Refueling Family	ETKXR0111GAK		Cert Region			Federal			
Cert/In-Use Code	Both		Standard Level			Federal LEV-II Evap			
Test Procedure	California Fuel Running Loss								
Fuel	Useful Life	Emission Name	Rounded Result			Std	Add DF		
Gasoline	120,000 miles	HC	--			0.05	0		

Evaporative/Refueling Family	ETKXR0111GAK		Cert Region			Federal			
Cert/In-Use Code	Both		Standard Level			Federal LEV-II Evap			
Test Procedure	CA fuel 3-day evap.								
Fuel	Useful Life	Emission Name	Rounded Result			Std	Add DF		
Gasoline	120,000 miles	HC-TOTAL	--			0.5	0.003		

Certification Summary Information Report

Test Group	ETKXV02.55NN		Evaporative/Refueling Family	ETKXR0111GAK	
Evaporative/Refueling Family	ETKXR0111GAK		Cert Region	Federal	
Cert/In-Use Code	Both		Standard Level	Federal LEV-II Evap	
Test Procedure	California fuel 2-day evap				
Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF
Gasoline	120,000 miles	HC-TOTAL	--	0.65	0.003

Certification Summary Information Report

Test Group	ETKXV02.55NN	Evaporative/Refueling Family	ETKXR0111GAK
Glossary			
Useful Life			
4	4,000 miles	120	120,000 miles
50	50,000 miles	150	150,000 miles
100	100,000 miles		
Emission Name			
HC-TOTAL	Total Hydrocarbon	FE BAG 4	Bag 4 Fuel Economy
CO	Carbon Monoxide	MFR FE	Manufacturer Fuel Economy
CO2	Carbon dioxide	HC	Hydrocarbon for Running Loss and ORVR
CREE	Carbon-Related Exhaust Emissions	METHANE	CH4 - Methane
OPT-CREE	Optional Carbon-Related Exhaust Emissions	METHANOL	CH3OH - Methanol
NOX	Nitrogen Oxide	N2O	Nitrous Oxide
PM	Particulate Matter	SPITBACK	Spitback Hydrocarbon in grams
PM-COMP	SFTP Composite Particulate Matter	AMP-HRS	Integrated Amp-hours
HC-NM	Non-methane Hydrocarbon	START-SOC	System Start State of Charge Watt-hours
OMHCE	Organic material Hydrocarbon Equivalent	END-SOC	System End State of Charge Watt-hours
OMNMHCE	Organic material non-methane HC equivalent	ACT-DISTANCE	Actual Distance Driven (miles)
NMOG	Non-methane organic gas (California)	AS-VOLT	Average System Voltage
HCHO	Formaldehyde	CO2 BAG 1	Bag 1 Carbon Dioxide
H3C2HO	Acetaldehyde	CO2 BAG 2	Bag 2 Carbon Dioxide
HC-NM+NOX	SFTP Non-methane Hydrocarbon + Nitrogen Oxides for US06 or SC03	CO2 BAG 3	Bag 3 Carbon Dioxide
HC-NM+NOX-COMP	SFTP Composite Non-methane Hydrocarbon + Nitrogen Oxides	CO2 BAG 4	Bag 4 Carbon Dioxide
CO-COMP	SFTP Composite Carbon Monoxide	NMOG+NOX	Non-methane organic gases plus Nitrogen Oxides
ETHANOL	C2H5OH - Ethanol	NMOG+NOX-COMP	SFTP Composite Non-methane Organic Gases + Nitrogen Oxides
FE BAG 1	Bag 1 Fuel Economy	DT-IWRR	Drive Trace Inertia Work Ratio Rating
FE BAG 2	Bag 2 Fuel Economy	DT-ASCR	Drive Trace Absolute Speed Change Rating
FE BAG 3	Bag 3 Fuel Economy	DT-EER	Drive Trace Energy Economy Rating
Certification Region			
CA	California + CAA Section 177 states	FA	Federal
Exhaust Emission Standard Level			
B1	Federal Tier 2 Bin 1	L2SULEV30	California LEV-II SULEV30
B2	Federal Tier 2 Bin 2	L2LEV395	California LEV-II LEV395
B3	Federal Tier 2 Bin 3	L2ULEV340	California LEV-II ULEV340
B4	Federal Tier 2 Bin 4	L2LEV630	California LEV-II LEV630
B5	Federal Tier 2 Bin 5	L2ULEV570	California LEV-II ULEV570
B6	Federal Tier 2 Bin 6	L3LEV160	California LEV-III LEV160
B7	Federal Tier 2 Bin 7	L3ULEV125	California LEV-III ULEV125
B8	Federal Tier 2 Bin 8	L3ULEV70	California LEV-III ULEV70
B9	Federal Tier 2 Bin 9	L3ULEV50	California LEV-III ULEV50

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Test Group	ETKXV02.55NN	Evaporative/Refueling Family	ETKXR0111GAK
B10	Federal Tier 2 Bin 10	L3SULEV30	California LEV-III SULEV30
B11	Federal Tier 2 Bin 11	L3SULEV20	California LEV-III SULEV20
HDV1	HDV1 (Federal HD chassis Class 2b GVW 8501-10000)	L3LEV395	California LEV-III LEV395
HDV2	HDV2 (Federal HD chassis Class 3 GVW 10001-14000)	L3ULEV340	California LEV-III ULEV340
L2	California LEV-II LEV	L3ULEV250	California LEV-III ULEV250
L2OP	California LEV-II LEV Optional	L3ULEV200	California LEV-III ULEV200
U2	California LEV-II ULEV	L3SULEV170	California LEV-III SULEV170
S2	California LEV-II SULEV	L3SULEV150	California LEV-III SULEV150
ZEV	California ZEV	L3LEV630	California LEV-III LEV630
OT	Other	L3ULEV570	California LEV-III ULEV570
T1	Federal Tier 1	L3ULEV400	California LEV-III ULEV400
PZEV	California PZEV	L3ULEV270	California LEV-III ULEV270
L2LEV160	California LEV-II LEV160	L3SULEV230	California LEV-III SULEV230
L2ULEV125	California LEV-II ULEV125	L3SULEV200	California LEV-III SULEV200
Transmission Type Code			
AMS	Automated Manual- Selectable (e.g. Automated Manual with paddles)	M	Manual
A	Automatic	OT	Other
AM	Automated Manual	SA	Semi-Automatic
CVT	Continuously Variable	SCV	Selectable Continuously Variable (e.g. CVT with paddles)
Drive System Code			
4	4-Wheel Drive	P	Part-time 4-Wheel Drive
F	2-Wheel Drive, Front	A	All Wheel Drive
R	2-Wheel Drive, Rear		
Additional Terms and Acronyms			
AFC	Alternative Fuel Converter	ICI	Independent Commercial Importer
CSI	Certificate Summary Information	ORVR	Onboard Refueling Vapor Recovery
DF	Deterioration Factor	SIL	Shift Indicator Light
Evap	Evaporation, Evaporative	Trans	Transmission