







2022

Hyundai BAYON

1.0 T-GDI 48V petrol FWD automatic



Clean Air Index

Energy Efficiency Index



Greenhouse Gas Index



	Laboratory Test	NMHC	NO _x	NH ₃	со	PN
2.3 /10	Cold Test					
6.1 /10	Warm Test					
0.0 /10	Highway					
	Cold Ambient Test	Does not qu	ualify for addit	ional robustne	ess testing	
	Road Test					
5.6 /10	On-Road Drive					
1.6 /5	On-Road Short Trip					
	On-Road Heavy Load	Does not qu	ualify for addit	ional robustne	ess testing	
	On-Road Light Load	Does not qu	ualify for addit	ional robustne	ess testing	
	Congestion	Does not qu	ualify for addit	ional robustne	ess testing	













Comments

The Hyundai BAYON fails to impress with its control of pollutants. Its emissions of particles are close to the upper thresholds in all tests, while CO is greatly elevated in the highway test, decreasing the points scored in this test. With NH₃ emissions also higher than the upper threshold, the BAYON fails to score any points here, because the gross exceedance of CO sets the whole motorway test results to zero. This leads to a mere 3.4 out of 10 points in the Clean Air assessment. On the plus side, NO_x are managed quite well, even in real world driving, with 3.5 points out of 4 in the on-road drive test.



Energy Efficiency Tests

	Laboratory Test	Energy	
6.3 /10	Cold Test		
6.5 /10	Warm Test		
3.3 /10	Highway		
	Cold Ambient Test	Does not qualify for a	dditional robustness testing
		Consumption	Driving Range
	Average	6.0 l/100 km	685 km
	Worst-case	7.7 I/100 km	519 km







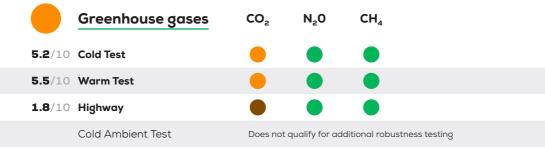






The mild hybrid system ensures reasonable results in the WLTC+ tests. Once again, it is in the highway test that the BAYON loses most points. A bigger hybrid battery combined with a more powerful electric drivetrain could probably support the small three-cylinder engine better.

Comments



adequate marginal

weak

Comments

The Hyundai BAYON delivers the CO₂ levels indicated by its type approval. Indeed, in both WLTC+ cycles, the car produces even less CO2 emissions than declared. Unfortunately, the addition of greenhouse gases for fuel production and supply (Well-to-Tank+) pushes the BAYON down to a moderate 4.1 out of 10 points. Methane and laughing gas score all possible points in all tests, helping the BAYON to avoid a negative result in highway driving.



The Hyundai BAYON 1.0 T-GDI 48V scores $2\frac{1}{2}$ stars overall despite having a small engine with an even smaller electrical boost by its 48V mild hybrid system. This is not enough to balance out the problems of the three-cylinder engine especially under constant high load. The BAYON displays typical advantages and disadvantages of a petrol engine: well managed NO $_{x}$ emissions and sometimes high CO emissions under high load. The car is equipped with a GPF, yet in all tests it produces particles that are close to exceeding the limits at which positive points are scored.

Disclaimer

Publication Date

Tested Car NLHBR81GGNZ04xxx Tyres 205/55 R17 Emissions Class

Mass

Engine Size 998 cc Power/Torque 88 kW/200 Nm Declared CO₂ 120 g/km

Declared Battery Capacity

Declared Driving Range n.a.

Declared Consumption 5.3 I/100km

