

# POLESTAR 2

FEBRUARY 2022 - ONWARDS  
ALL VARIANTS



**ANCAP**  
SAFETY

TESTED  
2021



<b>RATING YEAR</b>	2021
<b>VEHICLE TYPE</b>	Medium Car
<b>ENGINE TYPE</b>	Battery Electric Vehicle (BEV)
<b>BUILT FROM</b>	October 2021
<b>ON SALE FROM</b>	February 2022
<b>SERIES</b>	N/A
<b>AIRBAGS</b>	Dual frontal, side chest, side head, centre

The Polestar 2 was introduced in Australia and New Zealand in February 2022. This ANCAP safety rating applies to all variants.

Dual frontal, side chest-protecting and side head-protecting (curtain) airbags are standard. A centre airbag which provides added protection to front seat occupants in side impact crashes is also standard on all variants.

Autonomous emergency braking (Car-to-Car, Vulnerable Road User and Junction Assist) as well as a lane support system with lane keep assist (LKA), lane departure warning (LDW) and emergency lane keeping (ELK), and an advanced speed assistance system (SAS) are standard on all variants.



**92%**

ADULT OCCUPANT  
PROTECTION



**87%**

CHILD OCCUPANT  
PROTECTION



**80%**

VULNERABLE ROAD USER  
PROTECTION



**82%**

SAFETY  
ASSIST

## RATING APPLICABILITY

VARIANT	BODY TYPE	ENGINE	DRIVETRAIN	AUS	NZ
Polestar 2 Long Range Dual Motor	5 door hatch	300 kW electric	AWD	✓	✓
Polestar 2 Long Range Single Motor	5 door hatch	170 kW electric	FWD	✓	✓
Polestar 2 Standard Range Single Motor	5 door hatch	170 kW electric	FWD	✓	✓
Polestar 2 Long Range Single Motor	5 door hatch	220 kW electric	RWD	✓	✓
Polestar 2 Standard Range Single Motor	5 door hatch	200 kW electric	RWD	✓	✓

## ADULT OCCUPANT PROTECTION



**92%**

35.22 POINTS  
OUT OF 38

The passenger compartment remained stable in the frontal offset (MPDB) test. Protection was GOOD for all critical body regions of both the driver and front passenger except the lower legs where protection was ADEQUATE.

The front structure of the Polestar 2 presented a higher risk to occupants of an oncoming vehicle in the MPDB test (which evaluates vehicle-to-vehicle compatibility), and a 4.00 point penalty was applied.

In the full width frontal test, protection of the driver dummy was GOOD for all critical body areas. Protection of the rear passenger chest was ADEQUATE.

In the side impact test, protection offered to all critical body regions of the driver was GOOD. In the oblique pole test, protection was ADEQUATE for the chest of the driver and GOOD for all other critical body regions.

The Polestar 2 is equipped with a centre airbag to protect against occupant-to-occupant interaction in side impacts and it provided GOOD protection for the head of both front seat occupants. Prevention of excursion (movement towards the other side of the vehicle) in the far side impact tests was assessed as GOOD for both the vehicle-to-vehicle impact scenario and the vehicle-to-pole scenario.

A Rescue Sheet, providing information for first responders in the event of a crash is available, and a multi-collision braking system is fitted.

<b>FRONTAL OFFSET (MPDB)#</b>	5.96	(out of 8)
<b>FULL WIDTH FRONTAL#</b>	7.91	(out of 8)
<b>SIDE IMPACT#</b>	6.00	(out of 6)
<b>OBLIQUE POLE#</b>	5.59	(out of 6)
<b>WHIPLASH PROTECTION</b>	3.75	(out of 4)
<b>FAR SIDE IMPACT</b>	4.00	(out of 4)
<b>RESCUE &amp; EXTRICATION</b>	2.00	(out of 2)

# Scaled scores. Total test scored out of 16.00 points.

### FRONTAL OFFSET (MPDB) (50km/h)



#### DRIVER

Head / neck:	4.00 pts
Chest:	4.00 pts
Upper legs:	4.00 pts
Lower legs:	3.96 pts
Deductions:	Nil

#### FRONT PASSENGER

Head / neck:	4.00 pts
Chest:	4.00 pts
Upper legs:	4.00 pts
Lower legs:	3.93 pts
Deductions:	Nil

#### COMPATIBILITY

Deductions:	-4.00 pts
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### FULL WIDTH FRONTAL (50km/h)



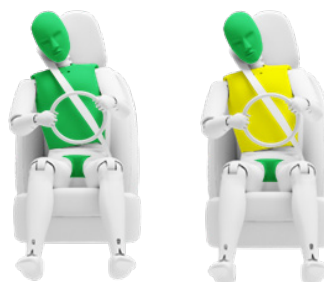
#### DRIVER

Head:	4.00 pts
Neck:	4.00 pts
Chest:	4.00 pts
Upper legs:	4.00 pts
Deductions:	Nil

#### REAR PASSENGER

Head:	4.00 pts
Neck:	4.00 pts
Chest:	3.65 pts
Upper legs:	4.00 pts
Deductions:	Nil

### SIDE IMPACT OBLIQUE POLE



#### SIDE IMPACT (MDB) (60km/h)

Head:	4.00 pts
Chest:	4.00 pts
Abdomen:	4.00 pts
Pelvis:	4.00 pts
Deductions:	Nil

#### OBLIQUE POLE (32km/h)

Head:	4.00 pts
Chest:	2.92 pts
Abdomen:	4.00 pts
Pelvis:	4.00 pts
Deductions:	Nil

### FAR SIDE IMPACT



#### SIDE IMPACT (MDB)

Head:	4.00 pts
Neck:	4.00 pts
Chest & Abdomen:	4.00 pts
Pelvis:	No penalty

#### OBLIQUE POLE

Head:	4.00 pts
Neck:	4.00 pts
Chest & Abdomen:	4.00 pts
Pelvis:	No penalty

#### OCCUPANT-TO-OCCUPANT

Head contact:	No penalty
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### WHIPLASH (REAR IMPACT) PROTECTION



Driver / front passenger:	3.00 pts
Rear passenger:	0.75 pts

### RESCUE & EXTRICATION

Rescue Sheet	●	No penalty
Door Opening / Extrication	●	No penalty
Multi-Collision Braking	●	1.00 pt
Advanced eCall	✗	1.00 pt default



87%

43.03 POINTS  
OUT OF 49

In both the frontal offset and side impact tests, protection was GOOD for all critical body areas for both the 6 year and 10 year child dummies.

The Polestar 2 is fitted with lower ISOFix anchorages on the rear outboard seats and top tether anchorages for all rear seating positions.

Installation of typical child restraints available in Australia and New Zealand showed most child restraints could be accommodated in most rear seating positions, however the Type A capsule could not be correctly installed in the rear outboard seating positions, one of the selected Type A convertible seats could not be correctly installed in rearward facing mode using the ISOFix anchorages, and one of the selected booster seats could not be correctly installed in the centre rear seating position.

<b>DYNAMIC TEST (FRONT)</b>	16.00	(out of 16)
<b>DYNAMIC TEST (SIDE)</b>	8.00	(out of 8)
<b>RESTRAINT INSTALLATION</b>	11.03	(out of 12)
<b>ON-BOARD SAFETY FEATURES</b>	8.00	(out of 13)

## FRONTAL OFFSET (MPDB) (50km/h)



6 YEAR OLD

10 YEAR OLD

## SIDE IMPACT (60km/h)



10 YEAR OLD

6 YEAR OLD

## ON-BOARD SAFETY FEATURES

FEATURE	FRONT PASSENGER	2nd ROW OUTBOARD	2nd ROW CENTRE	3rd ROW OUTBOARD	3rd ROW CENTRE
ISOFix	×	●	×	-	-
Integrated child restraints	×	×	×	-	-
Top tether anchorage	×	●	●	-	-
Airbag disabling	×	-	-	-	-

● FITTED TO TEST CAR AS STANDARD

● NOT FITTED TO TEST CAR BUT AVAILABLE AS AN OPTION

× NOT AVAILABLE

- NOT APPLICABLE

GOOD ADEQUATE MARGINAL WEAK POOR

**NOTE:** The child restraints fitted to vehicles tested by Euro NCAP are relevant to the European market. For Australasian consumers, this information should be used as a guide to vehicle features only. The Child Restraint Evaluation Program (CREP) provides an independent assessment on the safety of Australasian child restraints - see [www.childcarseats.com.au](http://www.childcarseats.com.au).



## CHILD RESTRAINT INSTALLATION\*

CHILD RESTRAINT (CRS) TYPE^		FRONT ROW	2nd ROW			3rd ROW		
		PASSENGER	LEFT	CENTRE	RIGHT	LEFT	CENTRE	RIGHT
BELTED	TYPE A	Rearward facing capsule	×	●	●	●	-	-
	TYPE A	Rearward facing with harness - convertible (Model A)	×	●	●	●	-	-
	TYPE A	Rearward facing with harness - convertible (Model B)	×	●	●	●	-	-
	TYPE B	Forward facing with harness - convertible (Model A)	×	●	●	●	-	-
	TYPE B	Forward facing with harness - convertible (Model B)	×	●	●	●	-	-
	TYPE E	Booster - 4 to 8 years	×	●	●	●	-	-
ISOFIX	TYPE F	Booster - 4 to 10 years	×	●	●	●	-	-
	TYPE A	Rearward facing capsule	×	●	-	●	-	-
	TYPE A	Rearward facing with harness - convertible (Model A)	×	●	-	●	-	-
	TYPE A	Rearward facing with harness - convertible (Model B)	×	●	-	●	-	-
	TYPE B	Forward facing with harness - convertible (Model A)	×	●	-	●	-	-
	TYPE B	Forward facing with harness - convertible (Model B)	×	●	-	●	-	-

\* Installation of each child restraint is assessed separately in each position. Installation of multiple restraints has not been assessed and may not be possible.

^ The above list of child restraints has been selected to provide a general indication of the rated vehicle's ability to accommodate various CRS types. ANCAP does not endorse or recommend any one CRS brand or model, nor does it rate the safety of child restraints.



80%

43.54 POINTS  
OUT OF 54









The Polestar 2 has an 'active' bonnet. Sensors detect when a pedestrian is struck and actuators lift the bonnet to provide greater clearance to stiff components in the engine bay. The Polestar 2 was tested with the bonnet in the raised position and GOOD or ADEQUATE results were recorded over most of the bonnet area with some POOR results recorded around the windscreen pillars and the base of the windscreen. Protection of the pelvis was mixed, with areas of GOOD and POOR performance. The bumper provided GOOD protection to pedestrians' legs.













The AEB system offered ADEQUATE performance in tests of its effectiveness in pedestrian test scenarios. The AEB Backover system is optional and was not tested. GOOD performance was seen in cyclist test scenarios, with collisions avoided or mitigated in most scenarios. The system's overall performance was classified as GOOD.

HEAD IMPACTS	19.93	(out of 24)
UPPER LEG IMPACTS	4.07	(out of 6)
LOWER LEG IMPACTS	6.00	(out of 6)
AEB - Pedestrian (forward)	6.08	(out of 7)
AEB - Pedestrian (backover)	0.00	(out of 2)
AEB - Cyclist	7.46	(out of 9)

## AUTONOMOUS EMERGENCY BRAKING (PEDESTRIAN, CYCLIST & BACKOVER)

SYSTEM NAME:	Collision Avoidance and Mitigation (IntelliSafe)
TYPE:	Autonomous emergency braking with forward collision warning
OPERATIONAL FROM:	4-80 km/h
DESCRIPTION:	System functions in the daytime and night

AUTONOMOUS EMERGENCY BRAKING - PEDESTRIAN														
TEST SCENARIO	AEB + FCW		FORWARD										BACKOVER	
	Adult walking along road		Adult crossing towards kerb (50%)		Adult crossing from kerb (25%)		Adult crossing from kerb (75%)		Child running (obstructed)		Adult crossing side road, vehicle turning		Adult walking behind reversing vehicle	Adult standing behind reversing vehicle
	DAY	NIGHT	DAY	NIGHT	DAY	NIGHT	DAY	NIGHT	DAY	NIGHT	DAY	NIGHT	DAY	DAY
														
PERFORMANCE				-							-		-	
ADEQUATE														

AUTONOMOUS EMERGENCY BRAKING - CYCLIST					
TEST SCENARIO	FCW	FORWARD			
	Cyclist travelling along road (25%)	Cyclist crossing from kerb (obstructed)	Cyclist travelling along road (50%)	Cyclist crossing (nearside)	Cyclist crossing (farside)
	DAY	DAY	DAY	DAY	DAY
	 	   	 	 	 
PERFORMANCE					
GOOD					

## PEDESTRIAN IMPACT TEST (40 KM/H)





82%

13.23 POINTS  
OUT OF 16

The Polestar 2 is fitted with an autonomous emergency braking (AEB) system capable of functioning at highway speeds, a lane support system (LSS) with lane keep assist (LKA) and emergency lane keeping (ELK) functionality, and blind spot monitoring (BSM).

Tests of the AEB Car-to-Car system showed GOOD performance with collisions avoided or mitigated in all test scenarios, including AEB Junction Assist where the test vehicle can autonomously brake to avoid crashes when turning across the path of an oncoming vehicle or pedestrian. Overall, effectiveness of the AEB Car-to-Car system performance was rated as GOOD.

The Polestar 2 sold in Australia and New Zealand is available with an optional 'Blind Spot Information System with Steer Assist.' This system has been tested, however as the system is optional, a score for ELK Overtaking and BSM was not awarded.

Tests of lane support system functionality showed ADEQUATE performance overall, including in the remaining critical emergency lane keeping test scenarios.

A speed assistance system (SAS) with speed limit information function (SLIF) is standard equipment. This system can automatically set the maximum speed of the vehicle or inform the driver of the local speed limit, allowing the driver to set the speed accordingly.

A seatbelt reminder system is fitted to all seating positions with occupancy detection available for the front passenger and rear outboard seating positions. Occupant detection is not available for the centre rear seating position. A driver drowsiness monitor system is fitted as standard.

## OCCUPANT STATUS

- Seat belt reminders	1.67	(out of 2)
- Driver monitoring	1.00	(out of 1)

SPEED ASSISTANCE SYSTEMS 1.58 (out of 3)

LANE SUPPORT SYSTEMS 3.00 (out of 4)

AEB - Car-to-Car 3.98 (out of 4)

AEB - Junction Assist 2.00 (out of 2)

## LANE SUPPORT SYSTEMS (LSS)

SYSTEM NAME: Lane Keeping Aid (IntelliSafe)  
OPERATIONAL FROM: 65-205 km/h

EMERGENCY LANE KEEPING (ELK)									
TEST SCENARIO	Oncoming vehicle	Overtaking vehicle (GVT at 72 km/h)		Overtaking vehicle (GVT at 80 km/h)		Road edge			
		UNINTENTIONAL	INTENTIONAL	UNINTENTIONAL	INTENTIONAL				Solid line
PERFORMANCE									
GOOD									

LANE KEEP ASSIST (LKA)			
TEST SCENARIO	Dashed Line		Solid Line
PERFORMANCE			
GOOD			

HUMAN MACHINE INTERFACE (HMI)		
FUNCTION	Lane Departure Warning (LDW)	[NOT TESTED]
	Blind Spot Monitoring (BSM)	[NOT STANDARD]



## AUTONOMOUS EMERGENCY BRAKING (CAR-TO-CAR)

SYSTEM NAME:	Collision Avoidance and Mitigation (IntelliSafe)
TYPE:	Autonomous emergency braking with forward collision warning
OPERATIONAL FROM:	4-205 km/h
DESCRIPTION:	Defaults ON for every journey

HUMAN MACHINE INTERFACE (HMI)		
FUNCTION		
	Supplementary warning	PASS
	Restraint activation / dynamic retractors	PASS

AUTONOMOUS EMERGENCY BRAKING - CAR-TO-CAR									
TEST SCENARIO	Driving towards a stationary car					TEST VEHICLE SPEED	Turning across the path of oncoming vehicle		
	-50% OFFSET	-75% OFFSET	100% OFFSET	75% OFFSET	50% OFFSET		TARGET VEHICLE SPEED		
							30 KM/H	45 KM/H	55 KM/H
							10 KM/H		
AEB (10-50 km/h)									
FCW (30-80 km/h)									
PERFORMANCE	GOOD						GOOD		

AUTONOMOUS EMERGENCY BRAKING - CAR-TO-CAR									
TEST SCENARIO	Toward car braking lightly		Toward car braking heavily		Driving towards a slower moving car*				
	12m HEADWAY	40m HEADWAY	12m HEADWAY	40m HEADWAY					
AEB (10-50 km/h)									
FCW (50*-80 km/h)									
PERFORMANCE	GOOD								

## OCCUPANT STATUS

WARNING TYPE	DRIVER	FRONT PASSENGER	REAR PASSENGERS
Occupant Detection	-	●	●*
Seat Belt Reminder (Visual)	●	●	●
Seat Belt Reminder (Audible)	●	●	●
Driver Monitoring	●	-	-

\* Occupant detection not available for centre rear seating position

● PASS ● FAIL ✗ NOT AVAILABLE - NOT APPLICABLE

GOOD ADEQUATE MARGINAL WEAK POOR NOT TESTED

## SPEED ASSISTANCE SYSTEMS (SAS)

SAS FEATURE	DESCRIPTION
Speed Limit Information Function	Camera & map
Speed Limitation Function	Manually set



## SAFETY FEATURES & TECHNOLOGIES

FEATURE / TECHNOLOGY~	AVAILABILITY	
	AUS	NZ
Seat belts (three-point) for all forward-facing seats	●	●
Seat belt pre-tensioners (front)	●	●
Seat belt pre-tensioners (rear outboard) - 2nd row	●	●
Seat belt pre-tensioners (rear centre) - 2nd row	●	●
Seat belt pre-tensioners (rear outboard) - 3rd row	-	-
Intelligent seat belt reminder (driver)	●	●
Intelligent seat belt reminder (front passenger)	●	●
Intelligent seat belt reminder (2nd row seats)	●	●
Intelligent seat belt reminder (3rd row seats)	-	-
Airbag - frontal (driver)	●	●
Airbag - frontal (passenger)	●	●
Airbags - side, chest protection (front seats)	●	●
Airbags - side, chest protection (2nd row seats)	✗	✗
Airbags - side, chest protection (3rd row seats)	-	-
Airbags - side, head protection (front seats)	●	●
Airbags - side, head protection (2nd row seats)	●	●
Airbags - side, head protection (3rd row seats)	-	-
Airbag - centre	●	●
Airbag - knee (driver)	✗	✗
Airbag - knee (front passenger)	✗	✗
Airbag disabling switch - automatic (front passenger)	✗	✗
Airbag disabling switch - manual (front passenger)	✗	✗
Head restraints for all seats	●	●
Active bonnet	●	●
Adaptive cruise control (ACC)	○	○
Anti-lock braking system (ABS)	●	●
Autonomous emergency braking (AEB) - Car-to-Car	●	●
Autonomous emergency braking (AEB) - VRU	●	●
Autonomous emergency braking (AEB) - Backover	○	○
Autonomous emergency braking (AEB) - Junction Assist	●	●
Automatic emergency call (eCall)	●	●
Blind spot monitor (BSM)	○	○
Child presence alert	✗	✗
Electronic brakeforce distribution (EBD)	●	●
Electronic data recorder (EDR)	●	●
Electronic stability control (ESC)	●	●
Emergency brake assist (EBA)	●	●
Emergency stop signal (ESS)	●	●
Fatigue reminder	●	●
Fatigue monitor / detection	●	●
Forward collision warning (FCW)	●	●
ISOFix	●	●
Lane departure warning (LDW)	●	●
Lane keep assist (LKA)	●	●
Pre-crash systems	●	●
Rear cross-traffic alert (RCTA)	●	●
Reversing collision avoidance (camera)	●	●
Roll stability system	●	●
Secondary / multi-collision brake	●	●
Speed assistance - auto / intelligent speed limiter	●	●
Speed assistance - manual speed limiter	●	●
Speed assistance - speed sign recognition & warning	●	●
Smart (intelligent) key	✗	✗
Vehicle-to-infrastructure communication (V2I)	✗	✗
Vehicle-to-vehicle communication (V2V)	✗	✗

### TESTED MAKE / MODEL

Polestar 2 dual motor electric LHD

### TESTED VEHICLE(S) BUILT

2021

### TESTED BODY TYPE

Medium Car

### TESTED VEHICLE ENGINE

Battery Electric

### RATING PUBLISHED

February 2022

### RATING UPDATED

June 2023

#### MODEL VARIANTS:

ANCAP safety ratings do not automatically extend to variants that have different body styles, engine configurations, driven wheels or occupant restraint systems (e.g. fewer airbags). In these cases, ANCAP considers technical evidence submitted by manufacturers before deciding on the extension of a rating to additional variants of a model.

#### RATING YEAR (DATESTAMP):

The Rating Year denotes the year requirements against which a vehicle has been assessed. The Rating Year is determined by ANCAP and, for vehicles rated from 2018, the Rating Year is the year in which the vehicle was tested.

~ Specifications & availability subject to change. Please check with the vehicle manufacturer for confirmation of vehicle specification.

● STANDARD ○ OPTIONAL ✗ NOT AVAILABLE  
 ○ NOT AVAILABLE ON BASE VARIANT BUT STANDARD OR OPTIONAL ON HIGHER VARIANTS