

Mercedes-Benz M-Class

Mercedes-Benz ML 350 BlueTEC 4MATIC, LHD

2011



ADULT OCCUPANT



CHILD OCCUPANT



PEDESTRIAN



SAFETY ASSIST

ADULT OCCUPANT

Total 34 pts | 96%

FRONTAL IMPACT

15,3 pts



Driver



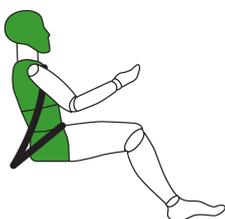
Passenger

SIDE IMPACT CAR

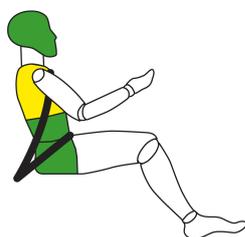
8 pts

SIDE IMPACT POLE

7,7 pts



Car



Pole

REAR IMPACT (WHIPLASH)

3,4 pts



FRONTAL IMPACT

HEAD

| | |
|--------------------------|--------|
| Driver airbag contact | stable |
| Passenger airbag contact | stable |

CHEST

| | |
|-----------------------------------|--------|
| Passenger compartment | stable |
| Windscreen Pillar rearward | 2mm |
| Steering wheel rearward | none |
| Steering wheel upward | none |
| Chest contact with steering wheel | none |

UPPER LEGS, KNEES AND PELVIS

| | |
|-------------------------------|------|
| Stiff structures in dashboard | None |
| Concentrated loads on knees | None |

LOWER LEGS AND FEET

| | |
|-------------------------|--------------------|
| Footwell Collapse | none |
| Rearward pedal movement | accelerator - 12mm |
| Upward pedal movement | accelerator - 26mm |

SIDE IMPACT

| | |
|-------------------------|-----|
| Head protection airbag | Yes |
| Chest protection airbag | Yes |

WHIPLASH

| | |
|----------------------|------------------------------------|
| Seat description | Standard , leather, 8 way electric |
| Head restraint type | Passive |
| Geometric assessment | 1 pts |

TESTS

| | |
|-------------------|---------|
| - High severity | 2,4 pts |
| - Medium severity | 2,6 pts |
| - Low severity | 2,4 pts |

TEST RESULTS

CHILD OCCUPANT

Total 37 pts | 75%

18 MONTH OLD CHILD

Restraint Britax Römer Baby Safe
Group 0, 0+
Facing rearward
Installation adult seat belt



PERFORMANCE 10,2 pts
INSTRUCTIONS 4 pts
INSTALLATION 2 pts

FRONTAL IMPACT

Head forward movement protected
Head acceleration good
Chest load fair

SIDE IMPACT

Head containment protected
Head acceleration good

3 YEAR OLD CHILD

Restraint Britax Römer Duo Plus
Group 1
Facing forward
Installation ISOFIX anchorages and top tether



PERFORMANCE 8,7 pts
INSTRUCTIONS 4 pts
INSTALLATION 2 pts

FRONTAL IMPACT

Head forward movement protected
Head acceleration good
Chest load fair

SIDE IMPACT

Head containment protected
Head acceleration good

VEHICLE BASED ASSESSMENT

6 pts

Airbag warning Label

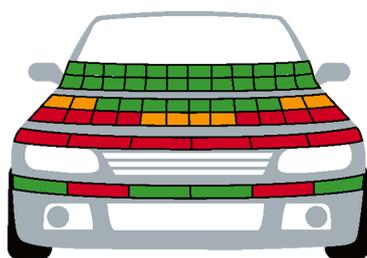
Text and pictogram warning label permanently attached to both sides of the passenger sun visor

PEDESTRIAN

Total 21 pts | 60%

SAFETY ASSIST

Total 6 pts | 86%



GOOD
MARGINAL
POOR

HEAD 17,4 pts
PELVIS 0 pts
LEG 4 pts

SPEED LIMITATION ASSISTANCE

0 pts

- active, standard

Fail

ELECTRONIC STABILITY CONTROL (ESC)

3 pts

- ESP

Pass

Yaw rate ratio (1.00s) 1,56 %

Yaw rate ratio (1.75s) 1,65 %

Lateral displacement (1.07s) 2,90 m

SEATBELT REMINDER

3 pts

- driver Pass

- passenger Pass

- rear Pass

DETAILS OF TESTED CAR

SPECIFICATIONS

| | |
|--------------------------------------|--|
| Tested model | Mercedes-Benz ML 350 BlueTEC 4MATIC, LHD |
| Body type | 5 door SUV |
| Year of publication | 2011 |
| Kerb weight | 2100kg |
| VIN from which rating applies | applies to all Mercedes-Benz M-Class of the specification tested |

SAFETY EQUIPMENT

| | |
|---------------------------------------|----------------------------------|
| Front seatbelt pretensioners | also rear outboard pretensioners |
| Front seatbelt load limiters | also rear outboard load limiters |
| Driver frontal airbag | dual stage |
| Front passenger frontal airbag | dual stage |
| Side body airbags | |
| Side head airbags | |
| Driver knee airbag | |
| Speed Limitation Assistance | |
| Electronic Stability Control | |
| Seatbelt Reminder | driver, passenger and rear |

COMMENTS

Adult occupant

The passenger compartment remained stable in the frontal impact. Dummy readings indicated good protection for the knees and femurs of both driver and front passenger. Mercedes Benz showed that a similar level of protection would be provided to occupants of different sizes and those sat in different positions. The M Class scored maximum points in the side barrier test. In the more severe side pole impact, protection of the chest was adequate and that of all other body areas was good. The front seats and head restraints provided good protection against whiplash injuries in the event of a rear impact.

Child occupant

Forward movement of the 3 year dummy, sat in a forward-facing restraint, was not excessive. In the side impact, both child dummies were properly contained within the protective shells of their restraints, minimising the risk of dangerous head contact. The front passenger airbag can be disabled only by child restraints equipped with Mercedes Benz's automatic sensor system, known as CPOD. As there is no way of disabling the airbag for other rearward-facing restraints, the system was not rewarded by Euro NCAP. Permanently attached labels provided clear warnings of the dangers of using that seating position without first disabling the airbag.

Pedestrian

The M Class has an 'active' bonnet. Sensors in the bumper detect when a pedestrian has been struck and actuators lift the rear of the bonnet to provide greater clearance to hard structures underneath. Mercedes demonstrated that the system would deploy correctly for a wide range of pedestrian statures, and over a broad speed range. In all areas likely to be struck by the head of an adult, the bonnet provided good protection. In the areas likely to be struck by a child's head, protection was mixed, with areas of good, marginal and poor performance. The protection offered by the front edge of the bonnet to pedestrians was poor.

Safety assist

The M Class has electronic stability control as standard, as well a seatbelt reminder system for the driver, passenger and rear seats. A driver-set speed limitation device is standard equipment but did not meet Euro NCAP's requirements.