

### AQUAPLANING

Driving into a consistent 6mm depth of water at 34mph on asphalt, the Golf we used for this test was accelerated until its wheel speed exceeded actual road speed by 15 per cent. Good aquaplaning performance is all about clearing water to keep rubber on the road, and relies heavily on tread design and the use of wide annular grooves.

All of the tyres performed well, the best by a very small margin being the Dunlop, which managed an average of 39.2mph before breaching the slip threshold. Close behind – all within just over 1mph – were the Michelin, Bridgestone and Continental, with the middle-order tyres not far off.

### AQUAPLANING

SPEED	mph	%
1. DUNLOP	39.2	100
2. MICHELIN	39.1	99.7
3. BRIDGESTONE	38.8	98.9
4. CONTINENTAL	38.1	97.1
5. PIRELLI	37.7	96.2
6. GOODYEAR	37.6	95.8
7. HANKOOK	37.4	95.3
8. KUMHO	37.3	95.1
9=. ACCELERA	37.0	94.4
9=. VREDESTEIN	37.0	94.4

Below: front-drive Golf used for this test because S3 would have sent some of its drive to the rear

Even those at the foot of the table, the Accelera and Vredestein, were within 2.2mph or less than six per cent of the Dunlop's performance.



*'GOOD AQUAPLANING PERFORMANCE IS ALL ABOUT CLEARING WATER TO KEEP RUBBER ON THE ROAD'*

### BRAKING

A budget tyre's relative lack of performance in general driving might not bother some, but in an emergency-stop situation you should hope that neither you nor the person behind is on a cheap tyre. On a wet surface from 50mph, the budget Accelera takes 42.1m to stop – that's 11.7m (38ft) further than the best tyre. Put another way, when the car on Continentals comes to rest, the car on Acceleras is still travelling at more than 20mph.

The Goodyear, Hankook, Pirelli and Michelin pull up within a metre of the Conti, the Dunlop and Bridgestone are within about half a car length, followed by the Vredestein and Kumho, which need 4.2 and 5.0m longer than the Conti to stop. Then, a further 6.7m later, comes the Accelera.

In the dry, the margin is smaller but the result is similar. The Goodyear stops from 60mph in the shortest distance at 36.9m, and the next six are



Below: back in an S3 for the wet braking test at MIRA. The difference in stopping distance between the best and worst performer is real food for thought

all within a metre of this. Then comes the Dunlop (just 1.4m down) and the Kumho (2.4m down) and finally the Accelera, which needs a full 4.6m more than the Goodyear.

A small consolation might be that the Accelera has the lowest rolling resistance, but the Goodyear, which is a vastly superior performer, is not far behind. The Bridgestone and Pirelli have the greatest resistance and would probably knock one mpg off a car capable of 30mpg on the Acceleras.

### BRAKING

WET BRAKING			DRY BRAKING			ROLLING RESIST		
	metres	%		metres	%	coeff	%	
1. CONTINENTAL	30.4	100	1. GOODYEAR	36.9	100.0	1. ACCELERA	8.5	100
2. GOODYEAR	30.5	99.8	2. PIRELLI	37.1	99.4	2. GOODYEAR	9.4	91.3
3. HANKOOK	30.6	99.5	3. BRIDGESTONE	37.3	99.0	3. KUMHO	9.9	86.7
4. PIRELLI	30.8	98.8	4. CONTINENTAL	37.4	98.7	4. HANKOOK	10.0	85.1
5. MICHELIN	31.4	97.0	5=. VREDESTEIN	37.5	98.4	5. MICHELIN	10.4	82.2
6. DUNLOP	32.1	94.8	5=. HANKOOK	37.5	98.4	6. VREDESTEIN	10.9	78.3
7. BRIDGESTONE	32.6	93.4	7. MICHELIN	37.6	98.1	7. DUNLOP	11.0	77.7
8. VREDESTEIN	34.6	88.0	8. DUNLOP	38.3	96.2	8. CONTINENTAL	11.8	72.3
9. KUMHO	35.4	85.9	9. KUMHO	39.3	93.9	9=. PIRELLI	12.1	70.6
10. ACCELERA	42.1	72.3	10. ACCELERA	41.5	89.0	9=. BRIDGESTONE	12.1	70.6

*'IN AN EMERGENCY-STOP SITUATION YOU SHOULD HOPE THAT NEITHER YOU NOR THE PERSON BEHIND IS ON A CHEAP TYRE'*

