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TÜV SÜD AUTOMOTIVE TIRE TEST - 2010 DIMENSION 195/65 R15 91H

CUSTOMER: ZHONGCE

REPORT NO.: 76243921

TEST CRITERIA:

WET HANDLING

DRY HANDLING



TIRE IDENTIFICATION TABLE												
TÜV- CODE	POSITION	DOT-CODE	BRAND	COMMERCIAL NAME	PRODUCTION COUNTRY	SIZE DESIGNATION	TREAD AND SIDEWALL INFORMATION	E / e - APPROVAL-NO.	UTQG- MARKING	SYMMETRY*	DIRECTIONALITY**	TREAD PROFILE
	FL	JUHDDBJ 2510	Goodride	RADIAL SP06+	China	195/65 R15 91H M+S	TR: 1 Polyester 2 Steel 2 Nylon SW: 1 Polyester	E4: 0237644	TW: 500 TR: A TEMP: A	A	Ν	
	FR	JUHDDBJ 2510										
В1-Н Н-1Р	RL	JUHDDBJ 2510										
	RR	JUHDDBJ 2510										
	SPARE	JUHDDBJ 2510										
	FL	JUHD DCJ 1410	Goodride	RADIAL SP06+	China	195/65 R15 91H M+S	TR: 2 Polyester 2 Steel 1 Nylon SW: 2 Polyester	E4: 0234752	TW: 500 TR: A TEMP: A	A	Ν	
	FR	JUHD DCJ 1410										
В2-Н Н-2Р	RL	JUHD DCJ 1410										
	RR	JUHD DCJ 1410										S / / E
	SPARE	JUHD DCJ 1410										
	FL	JUHDDBJ 2510	Goodride	RADIAL SP06+	China	195/65 R15 91H M+S	TR: 1 Polyester 2 Steel 2 Nylon SW: 1 Polyester	E4: 0237644	TW: 500 TR: A TEMP: A	A	Ν	
	FR	JUHDDBJ 2510										
B3-H L-1P	RL	JUHDDBJ 2510										
	RR	JUHDDBJ 2510										
	ROWI	JUHDDBJ 2510										
	FL	JUHDDCJ 2510		RADIAL SP06+	China	195/65 R15 91H M+S	TR: 2 Polyester 2 Steel 1 Nylon SW: 2 Polyester	E4: 0234752	TW: 500 TR: A TEMP: A	A	Ν	
B4-H L-2P	FR	JUHDDCJ 2510	Goodride									
	RL	JUHDDCJ 2510										
	RR	JUHDDCJ 2510										
	ROWI	JUHDDCJ 2510										



DATASHEET: WET HANDLING

WET HANDLING

												VVI	
Date:	21-Sep-10		Air Temperature [°C]	min: 12.0 max: 13.5		Surface Condition	wet handling , clockwis	se Tire l	nflation [bar]:	FA: 2.2 RA: 2.2	Test Vehicle:	Golf V 1.9 TDI	
Test Location:	OEAMTC Wachauring	(A)	Surface Temperature [°C]	min: 14.0 max: 16.9		Weather Condition:	: sunny		Driver:	Staude	Track Length [m]:	1050	
		CT Michelin Energy Saver	B1-H (H1P)	B2-H (H2P)	В3-Н (L1Р)	В4-Н (L2Р)	CT Michelin Energy Saver rerun	WET HANDLING RATINGS (INDIVIDU	Ster	R cha aring angle quirement	tesponse aracteristic Balance FA/RA		
Respo	onse characteristic	slow direct	sharp slow direct	slow direct	slow -9	slow direct	slow med. direct	Energy Saver	Feedback 📿		6	Self steering response underst.	10 = outstanding 9 = excellent
Steering a	angle requirement	8-	5	5+	6-	5-	-	(H1P)					8 = very good 7 = good
	Feedback	8-	5	6-	6	5+	-						6 = satisfactory 5 = just acceptable
Directiona	al control front axle	7+	5-	5+	6-	5+	-	(H2P) Direction	onal control	141 100		Self steering	4 = unsatisfactory 3 = poor
	al control rear axle	8	5	6-	6-	5	-		nt axle			response overst.	2 = very poor 1 = unacceptable
	orce characteristic	8-	5	6-	6-	5+	-	(L1P)					
Precisenes	ss /Tracking ability	7+	4+	5+	5+	5	-		Directional cont rear axle	rol	\rightarrow	Throttle lag reaction	
Tł	hrottle lag reaction	slight mone 8	strong slight none	slight 9	slight +9	slight 9	slight med.	Баланан (L2P)		Lateral force	Preciseness /		
Self steering	g response overst.	B none B mone B med.	slight none	stephene stight	slight	slight 10 +5	alight slight med.	WET HANDLING, AVERGAE SPEED [K	<u>м/н]</u>	characteristic	Tracking ability		
Self steering	response underst.	7+ and sight	strong sight none +5 none	sight - 0-	slight strong	slight 2+	slight med.	CT Michelin Energy Save				7	3,0
	Balance FA/RA	8	5	5+	6-	5+	-	B1-H (H1P))	67,1			
Average	rating (out of 10)	7,70	4,97	5,55	5,73	5,27	-	B2-H (H2P) B3-H (L1P)			68,5		
Rating compare	ed to Michelin[%]	100,0%	64,6%	72,0%	74,4%	68,5%		B4-H (L2P			68,1		
	Lap 1 [mm:ss,ss]	51,80	56,28	55,18	54,70	55,47	51,77	CT Michelin rerur				7	3,1
	Lap 2 [mm:ss,ss]	51,77	56,41	55,14	54,61	55,52	51,59		65	67	69 71	73	75
	Lap 3 [mm:ss,ss]	51,70	56,35	55,33	54,61	55,55	51,71	WET HANDLING TOTAOL PERFORMAN	NCE [%]				
Average Lap	p Time [mm:s,ss]	51,76	56,35	55,22	54,64	55,51	51,69	CT Michelin Energy Saver					100,0%
Resu	Iting Speed [kph]	73,0	67,1	68,5	69,2	68,1	73,1	B3-H (L1P)				87,9%	
Refe	erence Value [kph]	73,03	73,05	73,06	73,09	73,11	73,13						
Sp	eed compared to Michelin [%]	100,0%	91,8%	93,7%	94,6%	93,1%	100,0%	B2-H (H2P) B4-H (L2P)			86,3	5%	
	esult compared to Michelin [%] ng:Speed = 1:2)	100,0%	82,7%	86,5%	87,9%	84,9%	-	B1-H (H1P)	70%	75% 80%	82,7%	0% 95%	100%



COMMENTS: WET HANDLING

COMMENTS ON WET HANDLING

CT Michelin Energy Saver	constantly a good feedback requiring relatively small steering angles. Very good balance, rear axle always stable. Slightly stronger understeering in sharp curves and slight deficits in preciseness passing s-curves.
В1-Н (Н1Р)	the overall impression is inharmonious. Relatively large steering angles but barely acceptable. Throttle lag reactions are hard and are coming up very delayed. Permanent changes between oversteering and understeering are demanding many corrections. Overall the level of directional control is too low, resulting in insufficient safety reserves. The progressive lateral force characteristic makes it more difficult to drive precisely.
B2-H (H2P)	Compared to B1, the throttle lag reaction is less intense but slightly delayed. The lateral force characteristic is a little bit better balanced giving a better feedback around steering angle zero. Overall the direction control is on a too low level. In comparison to 1, the demand of correction is lower. The significant understeering and nervous rear axle are decreasing the tracking ability.
В3-Н (L1Р)	The response characteristic is almost similar to B1 with a slightly more harmonically the lateral force characteristic. This tire offers a slightly better feedback and a similar steering angle requirement as B2. The balance is slightly better. The rear axle pushes constantly and requires more attention of the driver, but demands less corrections in comparison to B1 and B2. In total the directional control is better but still too low. The level of feedback is also too low.
В4-Н (L2P)	This tire leaves nearly the same unbalanced overall impression as B1, but the lateral force built-up is better. The center point is badly defined and the response characteristic is slightly less progressive. The rear axle is extremely nervous, the vehicle changes permanently between understeering and oversteering what results in a bad tracking ability. Throttle lag reaction is less critical and less delayed than B1-B3. The feedback is worse than B2 and B3.



DATASHEET: DRY HANDLING

DRY HANDLING

											Ur	AT HANDLING
Date: 23-Sep-10		Air Temperature [°C]	: min: 18.0 max: 21.6		Surface Condition	HAK, clockwise		Tire Inflation [bar]:	FA: 2.2 RA: 2.2	Test Vehicle:	VW Golf V 1.9 TDI	
Test Location: ATP Papenburg	(D)	Surface Temperature [°C]	: min: 19.5 max: 25.1		Weather Condition	sunny		Driver:	Staude	Track Length [m]:	2600	
	CT Michelin Energy Saver	B1-H (H1P)	B2-H (H2P)	В3-Н (L1Р)	В4-Н (L2P)	CT Michelin Energy Saver rerun	Dry Handling Ratings (Ind	St	Respo charact eering equirement	nse eristic FA/RA	1	
Response character	stic 8 so so so	direct	direct slow	than 7- slaup	slow 2 slow	stow direct	BillionB1-H	Feedback <	1		Cornering	10 = outstanding 9 = excellent
Steering angle requiren	ent 8	6	6+	6	7-	-	(H1P)		The states of th		performance (grip)	8 = very good 7 = good
Feedb	ack 8+	6-	6-	6	6+	-						6 = satisfactory 5 = just acceptable
Lateral force character	stic 8+	6-	6+	7-	7	-	(H2P)	Lateral force	4	X+++++	Cornering	4 = unsatisfactory 3 = poor
Preciseness / Tracking al	ility 8	6	6	6+	7-	-		characteristic			stability (vmax)	2 = very poor 1 = unacceptable
Throttle lag read	tion 8+ and the set of the set	alight none 2 strong	Fight and the second se	strong slight med.	slight none -8 slight med.	none slight med.	B3-H (L1P)	Precisenes			Self steering	
Self stee response over		strong alight none 2 strong	fing 7+ un the the terms of terms	strong slight med.	and the state of t	none slight med.	бб -•−В4-Н (L2P)	Tracking abi	lity Throttle	Self steering	response underst.	
Self stee response unde		strong alight the strong	and the slight	strong med.	thore are the state of the stat	none stight med.	DRY HANDLING, AVERAGE SP	eed [Km/H]	lag reaction	response overst.		
Cornering stability (vn	ax) 8+	6-	6	6+	7-	-	CT Michelin Energy	Savar			99.0	
Cornering performance (rip) 8	6-	6+	6+	6+	-				97,7	55,0	
Balance FA	'RA 8+	5+	6+	7-	6+	-		(H1P)				
Average rating (out of	10) 8,18	6,09	6,48	6,67	6,85			I (H2P) I (L1P)		98,1		
Rating compare Michelin		74,5%	79,3%	81,5%	83,7%		B4-H	I (L2P)		98,	5 99.0	
Lap 1 [mm:se	,ss] 01:34,63	01:35,57	01:35,03	01:35,90	01:35,16	01:34,50	CT Michelin	rerun			99,0	
Lap 2 [mm:se	,ss] 01:34,53	01:35,85	01:35,73	01:35,76	01:35,04	01:34,57		95	96 97	98 99	100	101 102
Lap 3 [mm:se	,ss] 01:34,49	01:35,91	01:35,58	01:35,69	01:34,96	01:34,43	DRY HANDLING TOTAL PERFO	DRMANCE [%]				
Average lap time [mm:s	ss] 01:34,55	01:35,78	01:35,45	01:35,78	01:35,05	01:34,50	CT Michelin Energy	y Saver				100,0%
Resulting speed [ph] 99,0	97,7	98,1	97,7	98,5	99,0		B4-H (L2P)			94,2%	
Reference value [ph] 99,00	99,01	99,02	99,03	99,04	99,05		В3-Н			93,0%	
Speed compare Michelin		98,7%	99,0%	98,7%	99,4%	100,0%		(L1P) B2-H (H2P)			92,4%	
Overall result compa to Michelin (Rating:Speed = ·	[%] 100,0%	90,6%	92,4%	93,0%	94,2%			(H1P) 80%	85%	90,69	95%	100%



COMMENTS: DRY HANDLING

COMMENTS ON DRY HANDLING

CT Michelin Energy Saver	The center point is well defined and the tire offers a very harmonious lateral force characteristic. Only small steering angles required, very wide stability limit and very good balance.
В1-Н (Н1Р)	The response characteristic is slightly delayed but still ok. The lateral force characteristic is inharmonious, requiring large steering angles. The undefined feedback causes a relatively bad tracking ability. The stability limit is insufficient and appears with changes between understeering and oversteering. Throttle of lag reaction is clearly noticeable but ok. Poor and undefined feedback.
B2-H (H2P)	Compared to 1, this tire has a quite better response characteristic with an obvious more harmonically lateral force characteristic what leads to a significant improvement of the tracking ability which is just reduced by the comparative poor feedback. The stability limit is easier to handle and better signalized. Throttle lag reaction behaviour is more harmonically than B2, but more intensive than the reference.
B3-H (L1P)	In comparison to B2, the response characteristic is slightly delayed but better than the B1. Again a little improvement of lateral force characteristic offering a slightly better feedback. Compared to the Reference, the feedback performance is still too low. The stability limit signalizes more clearly than B2 and the tire offers a better balance, what gives a little bit more safety reserve. The throttle lag reaction is almost harmonically.
В4-Н (L2P)	The response characteristic is similar to B2, but offering a better lateral force characteristic. The feedback performance is ok, tracking ability sufficient and the balance slightly worse than B3.In fast s-turns the rear axle is only able to follow front axle with a delay. In total the stability limit is ok. The lateral force characteristic is still delayed in comparison to reference. The steering feeling more defined than B2.,