

THE NETHERLANDS  
(N E D E R L A N D)

## COMMUNICATION

Concerning <sup>(1)</sup>:

- ~~approval granted~~
- ~~approval extended~~
- ~~approval refused~~
- ~~approval withdrawn~~
- ~~production definitely discontinued~~

of a type of tyre with regard to 'rolling sound emission level' and/or 'adhesion performance on wet surfaces' and/or 'rolling resistance' pursuant to UN Regulation number 117.

**Approval number <sup>(2)</sup>: E4\*117R02/11\*07441\*01****Suffix(es) <sup>(3)</sup>: 02S2WR2**

1. Manufacturer's name and address : Otani Tire Co., Ltd.  
55 Mu 7, Klongmai, Samphran, Nakhon Pathom,  
73110, Thailand.
2. If applicable, name and address of  
manufacturer's representative : N/A
3. "Tyre class" of the type of tyre : Class C3
4. "Category of use" of the type of tyre : Snow
- 4.1. Snow tyre for use in severe snow  
conditions : ~~yes~~/no <sup>(1)</sup>
- 4.2. Traction tyre : ~~yes~~/no <sup>(1)</sup>
5. Tyre structure : Radial
6. Tyre type designation :
- 6.1. Brand name(s)/trademark(s) of the  
type of tyre : OTANI

- 6.2. Trade description(s)/Commercial name(s) of the type of tyre : OH-204
7. Technical service and, where applicable, test laboratory approved for purposes of approval or of verification of conformity tests : IDIADA Automotive Technology, S.A.  
L'Albornar, P.O. Box 20  
43710 Santa Oliva (Tarragona), SPAIN
8. Performance(s) approved : sound level at (~~stage 1~~/stage 2)<sup>(1)</sup>, wet adhesion level, rolling resistance level (~~stage 1~~/stage 2)<sup>(1)</sup>
- 8.1. Sound level of the representative tyre size, see paragraph 2.7. of this Regulation, as per item 7. of the test report in Appendix 1 to Annex 3: 72 dB(A) at reference speed of 70/80 km/h<sup>(1)</sup>.
- 8.2. Wet adhesion level of the representative tyre size, see paragraph 2.7. of this Regulation, as per item 7. of the test report in the appendix to Annex 5: 1.29 (G) using the vehicle ~~or trailer~~ method<sup>(1)</sup>.
- 8.3. Rolling resistance level of the representative tyre size, see paragraph 2.7. of this Regulation, as per item 7. of the test report in Appendix 1 to Annex 6: 6.22 N/kN.
- 8.4. Snow grip level of the representative tyre size, see paragraph 2.7. of Regulation No. 117, as per item 7. of the test report in the appendix<sup>(4)</sup> to Annex 7: N/A (Snow grip index) using the brake on snow method<sup>(1)</sup>, spin traction method<sup>(1)</sup> or acceleration method<sup>(1)</sup>.
9. Number of report issued by that service : Technical report CV20120929, Noise test report CV15060080, Wet grip test report CV20120914, Rolling Resistance test report CV19100677
10. Date of report issued by that service : Technical report 01/03/2021, Noise test 26/06/2015, Wet grip test 01/04/2015, Rolling Resistance test 25/10/2019
11. Reason(s) of extension (if applicable) : Update approved performances from S2R1 to S2WR2
12. Any remarks : Upgrade from supplement 06 to supplement 11
13. Place : Zoetermeer
14. Date : 08 March 2021
15. Signature :
16. Annexed to this communication are :
- 16.1. A list of documents in the approval file deposited at the Type Approval Authorities having delivered the approval and which can be obtained upon request<sup>(5)</sup>.



The image shows a blue ink signature, "R.F.R. Clement", written over a circular stamp. The stamp contains the RDW logo, which features a crown and the letters "RDW" below it.

- 16.2. A list of tyre size designations: Specify for each brand name/trademark and/or each trade description/Commercial name the list of tyre size designations and service descriptions, adding in case of Class C1 tyres whether "reinforced" (or "extra load") or not.

- 
- (1) Strike out what does not apply.  
(2) According to Schedule 4 to Revision 3 of the 1958 Agreement.  
(3) According to paragraphs 5.2.2. and 5.3.1.2. of this Regulation.  
(4) Appendix 2 for C1 and C2 tyres.  
Appendix 3 for C3 tyres.  
(5) In the case of 'snow tyre for use in severe snow conditions' a test report according to Appendix 2 of Annex 7 shall be submitted.



TECHNICAL DOCUMENTATION

Application form for approve of type of pneumatic for radial truck and bus according to ECE regulation no.117 with regard to their sound emissions, rolling resistance and to adhesion performance on wet surfaces (wet adhesion).

1. Brand name(s)/trademark(s), trade description(s)/commercial name(s): OTANI
2. Tyre type designation by manufacturer : OH-204
3. Manufacture' s name and address : 1. Otani Tire Co., Ltd.  
55 Mu 7, Klongmai, Samphran, Nakhon Pathom,  
73110, Thailand.  
2. Otani Radial Co., Ltd.  
96 Mu 3, Rimkhlongbanrai Road, Bangkeaw,  
Nakhon Chai Si. Nakhon Pathom, 73120, Thailand.
4. If applicable name and address of : Not applicable  
Manufacturer's representative
5. Tyre category : ~~C1/C2~~ C3
6. Category of use : Snow
7. Structure : ~~diagonal (bias ply)~~ Radial
8. Traction tyre : Yes/No
9. Submitted for approval on (date) : Feb 22, 2021

We here with declare that we have not applied and will not apply for any approval with another contracting party of ECE for the same type of product.

MANUFACTURER' S STAMP



Signature:



Name: Boonmee Jitrjai

THIS APPLICATION IS ACCOMPANIED BY:

Application form, relating to ECE approve for a pneumatic tyre pursuant Regulation Number 117 with regard to their sound emissions, rolling resistance and to adhesion performance on wet surfaces (wet adhesion).

- A drawing of tyre side wall, Tread and dimension cross section.

บริษัท โอตานิ เรเดียล จำกัด  
OTANI RADIAL CO., LTD.

96 หมู่ 3 ถนนริมคลองบ้านไร่ ตำบลบางแก้ว อำเภอนครชัยศรี จังหวัดนครปฐม 73120  
96 Mu 3 Rimkhlongbanrai Road, Bangkaew, Nakhon Chai Si, Nakhon Pathom 73120 Thailand  
Tel: +66 3432 7555 Fax: +66 3433 9563 E-mail: localsales@otanitire.com VAT ID: 0-7355-50001-55-5

[www.otanitire.com](http://www.otanitire.com)

## List of Tyre designation sizes

Brand name or Trade mark: OTANI

Tread pattern: OH-204

No.	Tyre size	PR	load	Speed	Approval Number
1	265/70R19.5	18	143/141	J	E11 0013095

The worst case for Rolling sound emission test:

TEST SIZE : 265/70R19.5 18PR 143/141 J

Because of : Biggest section width  
Lowest aspect ratio  
Biggest rim size

The worst case for Wet adhesion level test:

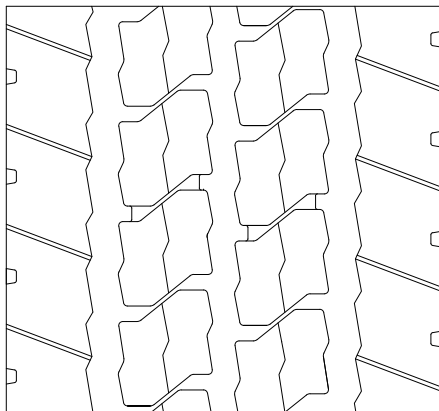
TEST SIZE : 265/70R19.5 18PR 143/141 J

Because of : Meets the extra ten per cent (10%) or more above the required value

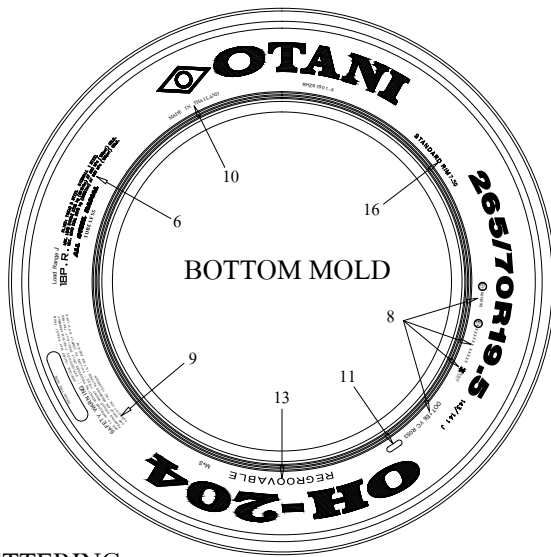
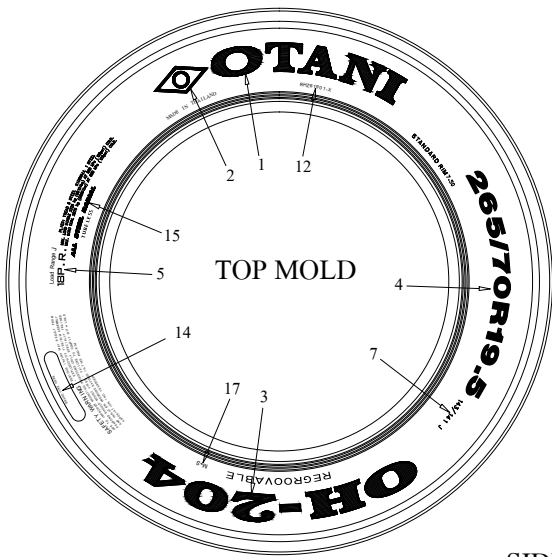
The worst case for Rolling resistance test:

TEST SIZE : 265/70R19.5 18PR 143/141 J

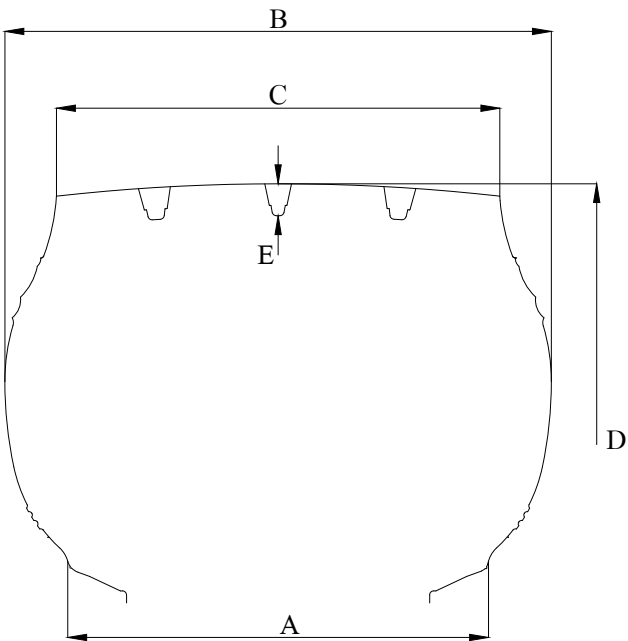
Because of : Lowest load index



TREAD PATTERN



SIDE LETTERING



CROSS SECTION

No	ITEM	DESCRIPTION	HEIGHT (mm)
1	TREAD MARK	OTANI	42
2	LOGO	OTANI LOGO	42
3	PATTERN	OH-204	40
4	TYRE SIZE	265/70R19.5	24
5	PLY RATING / LOAD RANGE	18 P.R. / LOAD RANGE / J	10 / 6 / 7
6	MAX.LOAD / TREAD / SIDEWALL	MAX.LOAD SINGLE 2725 kg (6010 lbs) AT 860 kPa (125 psi) COLD.	3.5
		MAX.LOAD DUAL 2575 kg (5680 lbs) AT 860 kPa (125 psi) COLD.	3.5
		5/1	3.5
7	LOAD INDEX / SPEED INDEX	143/141J	10
8	MARKING SD.	DOT 1E6 YC R053	6
		E11 0013095	6 / 4
		E4 XXXXXX XXXXX	6 / 4
		I 008207 / 2017	6
9	SAFETY WARNING	SAFETY WARNING	6 / 3
10	COUNTRY OF ORIGIN	MADE IN THAILAND	5
11	WEEK NUMBER	WEEK No.	5
12	MOLD NUMBER	RHZ61901-1,2,3,4	5
13	REGROOVABLE	REGROOVABLE	10
14	BRAND TIRE HERE	BRAND TIRE HERE	3
15	MARKING TIRE TYPE	ALL STEEL RADIAL / TUBELESS	5
16	STANDARD RIM	STANDARD RIM 7.50	5
17	MARKING M+S / 3PMSF	M+S	6

A (inch/mm)	B (mm)	C (mm)	D (mm)	E (mm)	OTANI RADIAL CO.,LTD.		
7.50/191	258	215	870	14	TITLE	265/70R19.5 OH-204 18PR	
REMARK :					CHEK/APPV D	MR. WITTAYA C.	SIGNATURE : WC
					DRAWN BY.	MR. SAHARAT K.	SIGNATURE : SK
					DATE	18 Dec. 2020	REVISION : 01

**REPORT No. CV20120929****UN REGULATION No. 117R02/11 RELATED TO ROLLING SOUND EMISSIONS, ADHESION ON WET SURFACES AND ROLLING RESISTANCE**

Approval number : E4\*117R02/11\*07441\*01  
Approved performances : S2WR2

Applicant : Otani Tire Co., Ltd.  
55 Mu 7, Klongmai, Samphran, Nakhon Pathom,  
73110, Thailand.

Manufacturer : Otani Tire Co., Ltd.  
55 Mu 7, Klongmai, Samphran, Nakhon Pathom,  
73110, Thailand.

Tyre class : C3

Category of use : Snow

Traction tyre : No

Brand name / Trade mark : OTANI

Trade description/ Commercial name : OH-204

Place and date of issue : L'Albornar, Santa Oliva (Tarragona), 01/03/2021

**CONCLUSIONS:** The tested samples of the family FULFIL the technical prescriptions with regard to “rolling sound emissions level” and/or “adhesion performance on wet surfaces” and/or “rolling resistance” pursuant to UN REGULATION No. 117R02/11. The modifications introduced in this family, as detailed in page 2 of this report, are considered reason for extension of the type approval (CV15030088).  
The characteristics of the tested samples are detailed in the annexes to the test report.

Performed by:



Alejandro Clara Requena  
HOMOLOGATION ENGINEER

Revised by:



Ignacio Lafuente Buil  
DEPARTMENT MANAGER



**REPORT No. CV20120929****SUMMARY**

1. Dimensions included in the type of tyre : See Manufacturer's technical documentation attached
2. Tyre sizes selected for testing
  - 2.1. Tyre size tested for rolling sound emissions : 265/70R19.5 143/141J (widest section width)  
See Annex 1, Test report CV15060080, IDIADA, 26/06/2015
  - 2.2. Tyre size tested for adhesion on wet surfaces: 265/70R19.5 143/141J (meets extra 10%)  
See Annex 2, Test report CV20120914, IDIADA, 01/04/2015
  - 2.3. Tyre tested for rolling resistance : 265/70R19.5 143/141J (lowest load index)  
See Annex 3, Test report CV19100677, IDIADA, 25/10/2019
3. Reason(s) of extension (if applicable) :
  - Update approved performances from S2R1 to S2WR2
  - Upgrade from supplement 06 to supplement 11
4. List of Annexes to this report
  - 4.1. Annex 1: Test report according to rolling sound emission level.
  - 4.2. Annex 2: Test report according to adhesion on wet surfaces.
  - 4.3. Annex 3: Test report according to rolling resistance.
  - 4.4. Annex: Manufacturer's technical documentation.

Place and date of issue: L'Albornar, Santa Oliva (Tarragona), 01/03/2021



Alejandro Clara Requena  
HOMOLOGATION ENGINEER

ANNEX 1

**REPORT N° CV15060080****UN/ECE REGULATION 117R02 RELATED TO ROLLING SOUND EMISSIONS**

Applicant : OTANI TIRE Co., LTD.  
55 Moo 7, Petchkasem Road  
K.M. 37, Sampran  
Nakompathom, 73110 THAILAND

Manufacturer : OTANI TIRE Co., LTD.  
55 Moo 7, Petchkasem Road  
K.M. 37, Sampran  
Nakompathom, 73110 THAILAND

Trade name : OTANI

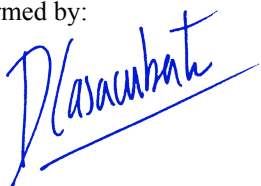
Commercial description : OH-204

Tyre Class : C3

Place and date of issue : L'Albornar, Santa Oliva (Tarragona), 30/06/2015

CONCLUSIONS: The tested samples of the family FULFIL the technical prescriptions with regard to "rolling sound emissions level" pursuant to UN/ECE REGULATION 117R02.  
The characteristics of the tested samples are detailed in the annex to the test report.

Performed by:



David Casacuberta Abril  
HOMOLOGATION ENGINEER

Revised by:



Ignacio Lafuente Buil  
DEPARTMENT MANAGER

## ANNEX TO THE TEST REPORT

### 1. TEST DATA

#### 1.1. Test tyre details

- 1.1.1 Applicant : OTANI TIRE Co., LTD.  
55 Moo 7, Petchkasem Road  
K.M. 37, Sampran  
Nakompathom, 73110 THAILAND
- 1.1.2 Manufacturer : OTANI TIRE Co., LTD.  
55 Moo 7, Petchkasem Road  
K.M. 37, Sampran  
Nakompathom, 73110 THAILAND
- 1.1.3 Trade name : OTANI
- 1.1.4 Commercial description : OH-204
- 1.1.5 Category of use : Snow
- 1.1.6 Tyre Class : C3
- 1.1.7 Tyre size : 265/70R19.5 143/141 J
- 1.1.8 Tyre structure : Radial
- 1.1.9 Load index / Corresponding mass  $Q_r$  [kg] : 143 / 2,725
- 1.1.10 Reference inflation pressure  $P_r$  [kPa] : 860
- 1.1.11 Test inflation pressure  $P_t$  [kPa] :

	$P_t$ [kPa] admissible values
Front axle left wheel	$567.47 \leq 610.00 \leq 624.22$
Front axle right wheel	$551.55 \leq 600.00 \leq 606.70$
Rear axle left wheel	$597.03 \leq 640.00 \leq 656.73$
Rear axle right wheel	$642.47 \leq 680.00 \leq 706.72$

$P_t \geq 150$  kPa

FULFILS / NOT FULFILS

1.1.12 Test tyre internal reference :

Front left	Front right
HVI-1502/634	HVI-1502/635

Rear left	Rear right
HVI-1502/636	HVI-1502/637

1.1.13 Test rim : 7.50 x 19.5

1.1.14 Test rim internal reference :

Front left	Front right
HVI-1205/1570	HVI-1205/1571

Rear left	Rear right
HVI-1205/1572	HVI-1205/1573

1.1.15 Test tyre load [kg] :

	kg	$Q_t [N] / \% \frac{Q_t}{Q_r}$
Front axle left wheel	1,954	$50 < 71.71 < 90$
Front axle right wheel	1,910	$50 < 70.09 < 90$
Rear axle left wheel	2,035	$50 < 74.68 < 90$
Rear axle right Wheel	2,158	$50 < 79.19 < 90$

FULFILS / ~~NOT FULFILS~~

$Q_{t,avr} [N] / \% \frac{Q_{t,avr}}{Q_r}$
$70 < 73.92 < 80$

FULFILS / ~~NOT FULFILS~~

## 1.2. Test vehicle

1.2.1	Trade name	: MAN
1.2.2	Model	: L2000
1.2.3	Year	: 2004
1.2.4	Transmission	: Manual
1.2.5	Wheelbase [mm]	: 4,250

For Class C3 less than 5,000 mm.

FULFILS / ~~NOT FULFILS~~

1.2.6	Vehicle internal reference	: HVI-1205/351
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## 1.3. Test equipment

1.3.1	Sound level meter 1	: 121738
1.3.2	Sound level meter 2	: 121739
1.3.3	Manometer	: 10246
1.3.4	Weight scale	: 01199
1.3.5	Track temperature measurement device	: 141537
1.3.6	Wind speed measurement device	: 150095
1.3.7	Speed measurement device	: 130204
1.3.8	Ambient temperature measurement device	: 10004

\* THE PRESENTED RESULTS REFER ONLY TO THE TESTED SAMPLE.

\* THE PARTIAL REPRODUCTION OF THIS REPORT WITHOUT THE PERMISSION OF IDIADA IS COMPLETELY FORBIDDEN.

\* MEASUREMENT UNCERTAINTY OF THE RESULTS HAS BEEN CALCULATED BY THE LABORATORY.

## 2. TEST TRACK

### 2.1. Environment

2.1.1 Air temperature  $T_a$  [°C] : 24.0

$5.0 < T_a < 40.0$

FULFILS / ~~NOT FULFILS~~

2.1.2. Test surface temperature  $T_s$  [°C] : 25.8

$5.0 \leq T_s \leq 50.0$

FULFILS / ~~NOT FULFILS~~

2.1.3 Wind speed [m/s] : 1.1

Less than 5 m/s

FULFILS / ~~NOT FULFILS~~

2.1.4 Ambient noise [dB(A)] : 53.4

Test result – Ambient noise  $\geq 10$  dB(A)

FULFILS / ~~NOT FULFILS~~

2.1.5 Barometer pressure [kPa] : 100.82

2.1.6 Relative humidity [%] : 56.04

2.1.7 Wind direction [°] : 195.0

### 2.2. Date and method of check on compliance of the test surface with ISO 10844:1994:

- May 25<sup>th</sup> 2015
- Sand patch
- Issued by : IDIADA

### 3. TEST RESULTS

Reference Speed:  $v_{ref}$  [km/h] : 70  
Range Speed [km/h] : 60.0 - 80.0

Run No.	Test speed [km/h]	Direction of run	Sound level left measured [dB(A)]	Sound level right measured [dB(A)]	Air temp. [°C]	Surface temp. [°C]	Sound level left temp. corrected [dB(A)]	Sound level right temp. corrected [dB(A)]
1	62.2	W → E	71.0	71.6	23.8	25.4	71.0	71.6
2	64.6	W → E	71.8	72.3	23.6	25.6	71.8	72.3
3	66.5	W → E	72.0	72.4	23.8	25.8	72.0	72.4
4	68.3	W → E	72.8	72.6	23.9	25.3	72.8	72.6
5	72.8	W → E	73.5	73.2	23.9	26.0	73.5	73.2
6	74.2	W → E	74.3	73.9	24.7	26.2	74.3	73.9
7	76.3	W → E	74.5	74.0	24.2	26.3	74.5	74.0
8	78.8	W → E	74.6	74.4	24.3	26.0	74.6	74.4

- 3.1. Regression line slope : 31.69
- 3.2. Sound level after temperature correction according to paragraph 4.3 of Annex 3 [dB(A)] : 73.0
- 3.3. Sound level according to paragraph 4.4. and 4.5. of Annex 3 [dB(A)] : 72
- 3.4. Limit value for the Class C3 tyre (Stage 2): 73 dB (A)

**FULFILS / NOT-FULFILS**

Place of test: L'Albornar (Santa Oliva)  
Date of test: 26/06/2015



David Casacuberta Abril  
HOMOLOGATION ENGINEER



ANNEX 2

## REPORT N° CV20120914

UN REGULATION No. 117R02/11 RELATED TO ADHESION ON WET SURFACES

Applicant	: OTANI TIRE Co., LTD. 55 MOO 7, PETCHKASEM ROAD K.M. 37, SAMPRAN, NAKOMPATTHOM, 73110, THAILAND
Manufacturer	: OTANI TIRE Co., LTD. 55 MOO 7, PETCHKASEM ROAD K.M. 37, SAMPRAN, NAKOMPATTHOM, 73110, THAILAND
Tyre class	: C3
Category of use	: Snow
Traction tyre	: No
Brand name / Trade mark	: OTANI
Trade description/ Commercial name	: OH-204
Tyre size	: 265/70R19.5 143/141J
Wet grip index relative to SRTT according to paragraph 2.2.2.7.5.	: 1.29
Place and date of issue	: L'Albornar, Santa Oliva (Tarragona), 16/12/2020

CONCLUSIONS: The samples of the family have been tested according to the technical prescriptions with regard to "adhesion performance on wet surfaces" pursuant to UN Regulation No. 117R02/11. The characteristics of the tested samples are detailed in the annex to the test report. Test configuration as per paragraph 2.2.2.2.: *Configuration 1 (4 candidate tyres in test vehicle)*

Performed by:

Revised by:



Alejandro Clara Requena  
HOMOLOGATION ENGINEER



Ignacio Lafuente Buil  
DEPARTMENT MANAGER

\* THE TESTS HAVE BEEN CARRIED OUT BY IDIADA AUTOMOTIVE TECHNOLOGY, S.A. LABORATORY ACCREDITED BY ENAC WITH NUMBER OF ACCREDITATION 35/LE159.  
\* THE PRESENTED RESULTS REFER ONLY TO THE TESTED SAMPLE.  
\* THE PARTIAL REPRODUCTION OF THIS REPORT WITHOUT THE PERMISSION OF IDIADA IS COMPLETELY FORBIDDEN.  
\* MEASUREMENT UNCERTAINTY OF THE RESULTS HAS BEEN CALCULATED BY THE LABORATORY.

**ANNEX TO THE TEST REPORT**  
ADHESION ON WET SURFACES, REPORT N° CV20120914

**1. TEST DATA**

**1.1. Test tyre details**

1.1.1	Applicant <sup>(1)</sup>	: OTANI TIRE Co., LTD. 55 MOO 7, PETCHKASEM ROAD K.M. 37, SAMPRAN, NAKOMPATHOM, 73110, THAILAND
1.1.2	Manufacturer <sup>(1)</sup>	: OTANI TIRE Co., LTD. 55 MOO 7, PETCHKASEM ROAD K.M. 37, SAMPRAN, NAKOMPATHOM, 73110, THAILAND
1.1.3	Tyre class	: C3
1.1.4	Category of use	: Snow
1.1.5	Traction tyre	: No
1.1.6	Brand name / Trade mark	: OTANI
1.1.7	Trade description / Commercial name	: OH-204
1.1.8	Tyre size	: 265/70R19.5 143/141J
1.1.9	Load index / Corresponding mass Q <sub>r</sub> [kg]	: 143 / 2,725
1.1.10	Tyre structure	: Radial
1.1.11	Date code, other manufacturer markings	: -
1.1.12	Reference inflation pressure [kPa]	: 860

<sup>(1)</sup> Information provided by the client. The laboratory is not responsible for such information

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\* THE TESTS HAVE BEEN CARRIED OUT BY IDIADA AUTOMOTIVE TECHNOLOGY, S.A. LABORATORY ACCREDITED BY ENAC WITH NUMBER OF ACCREDITATION 35/LE159.  
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 \* MEASUREMENT UNCERTAINTY OF THE RESULTS HAS BEEN CALCULATED BY THE LABORATORY.

1.1.13 Test tyre internal reference :

Front left	Front right
HVI-1502/634	HVI-1502/635

Rear left	Rear right
HVI-1502/636	HVI-1502/637

1.1.14 Test rim : 7.50 x 19.5

1.1.15 Test rim internal reference :

Front left	Front right
HVI-1205/1570	HVI-1205/1571

Rear left	Rear right
HVI-1205/1572	HVI-1205/1573

1.1.16 SRTT identification : MICHELIN 245/70 R19.5 - ASTM F 2871

1.1.17 SRTT internal reference :

Front left	Front right
HVI-1204/01	HVI-1204/02

Rear left	Rear right
HVI-1204/03	HVI-1204/04

1.1.18 Test SRTT rim : 7.50 x 19.5

1.1.19 Test SRTT rim internal reference :

Front left	Front right
HVI-1206/249	HVI-1206/252

Rear left	Rear right
HVI-1206/250	HVI-1206/251

1.1.20 Test tyre load [kg] :

SRTT 1			Candidate tyre			SRTT 2		
FL	2,174	97.1% Q <sub>r</sub>	FL	2,181	80.0% Q <sub>r</sub>	FL	2,170	96.9% Q <sub>r</sub>
FR	2,114	94.4% Q <sub>r</sub>	FR	2,113	77.5% Q <sub>r</sub>	FR	2,094	93.5% Q <sub>r</sub>
RL	1,912	85.4% Q <sub>r</sub>	RL	1,900	69.7% Q <sub>r</sub>	RL	1,908	85.2% Q <sub>r</sub>
RR	1,929	86.1% Q <sub>r</sub>	RR	1,947	71.4% Q <sub>r</sub>	RR	1,933	86.3% Q <sub>r</sub>

Between 60 per cent and 100 per cent of the load value corresponding to the load index of the tyre.

FULFILS / NOT FULFILS

\* THE TESTS HAVE BEEN CARRIED OUT BY IDIADA AUTOMOTIVE TECHNOLOGY, S.A. LABORATORY ACCREDITED BY ENAC WITH NUMBER OF ACCREDITATION 35/LE159.

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## 1.2. Test vehicle

- 1.2.1 Trade name : RENAULT
- 1.2.2 Model : PREMIUM
- 1.2.3 Year : 2005
- 1.2.4 Transmission : Manual
- 1.2.5 Wheelbase [mm] : 3,650
- 1.2.6 Vehicle internal reference : HVI-1205/352
- 1.2.7 Vehicle configuration (ISO 15222) : Configuration 1 (4 candidate tyres in test vehicle)

## 1.3. Test inflation pressure

- 1.3.1 SRTT inflation pressure [kPa] :

	FL	FR	RL	RR
SRTT 1	732	707	624	630
SRTT 2	730	699	622	632

- 1.3.2 Candidate inflation pressure :

Candidate	Q <sub>t</sub> [kg]	Q <sub>r</sub> [kg]	Conditions	Cond. Used	Inflation pressure P <sub>t</sub> [kPa]
FL	2,181	2,725	1- If Q <sub>t</sub> < 75% Q <sub>r</sub> then: <b>P<sub>t</sub> = (0.7) x P<sub>r</sub></b>	2	651
FR	2,113	2,725		2	626
RL	1,900	2,725	2- If Q <sub>t</sub> ≥ 75% Q <sub>r</sub> then: <b>P<sub>t</sub> = P<sub>r</sub> x (Q<sub>t</sub> / Q<sub>r</sub>)<sup>1.25</sup></b>	1	602
RR	1,947	2,725		1	602

## 1.4. Test equipment

- 1.4.1 Manometer : 12331
- 1.4.2 Weight scale : 09057
- 1.4.3 Thermometer : 130665
- 1.4.4 Track temperature measurement device : 06349
- 1.4.5 Speed measurement device : 130204

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\* MEASUREMENT UNCERTAINTY OF THE RESULTS HAS BEEN CALCULATED BY THE LABORATORY.

## 2. TEST TRACK

- 2.1. Location : ABS Surface, IDIADA
- 2.2. Date of check on compliance of the test surface : 19<sup>th</sup> April 2014
- 2.3. Test track characteristics:
- 2.3.1 Texture depth [mm] : 0.85
- 2.3.2 BPN : 55
- 2.3.3 Water depth [mm] : Between 0.75 and 1.00
- 2.4. Test method : Vehicle
- 2.5. Air temperature  $T_a$  [°C] : 22.0
- 2.6. Wet surface temperature  $T_w$  [°C] :
- $5.0 \leq T_w \leq 35.0$

SRTT 1	Candidate tyre	SRTT 2
16.2	20.8	19.0

FULFILS / ~~NOT FULFILS~~

Variation during the test less than 10 °C

FULFILS / ~~NOT FULFILS~~

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### 3. TEST RESULTS

Test run	SRTT 1		Candidate tyre		SRTT 2	
	Braking distance [m]	Average deceleration [m/s <sup>2</sup> ]	Braking distance [m]	Average deceleration [m/s <sup>2</sup> ]	Braking distance [m]	Average deceleration [m/s <sup>2</sup> ]
1	33.24	3.71	27.07	4.56	33.88	3.64
2	33.60	3.67	26.05	4.74	34.37	3.59
3	34.50	3.58	26.60	4.64	33.81	3.65
4	-	-	26.11	4.73	-	-
5	-	-	25.94	4.76	-	-
6	-	-	26.31	4.69	-	-

Coefficient of variation

SRTT 1	Candidate tyre	SRTT 2
1.91	1.59	0.89
< 3 per cent	< 3 per cent	< 3 per cent

FULFILS / ~~NOT FULFILS~~

Test run	Test Speed [km/h]	Direction of run	SRTT	Candidate tyre	Mean fully developed deceleration (mfdd)	Wet Grip Index	Pedal force [N]
1	60 - 20	W - E	245/70R19.5	---	3.66 m/s <sup>2</sup>	---	> 600
2	60 - 20	W - E	---	265/70R19.5	4.69 m/s <sup>2</sup>	1.29	> 600
3	60 - 20	W - E	245/70R19.5	---	3.63 m/s <sup>2</sup>	---	> 600

**Wet grip index G = 1.29**

3.1. Limit value :

Category of use	Wet Grip Index (+10% Wet Grip Index) (G)			
	C2		C3	
	Other	Traction	Other	Traction
Normal	≥ 0.95 (≥ 1.05)	≥ 0.85 (≥ 0.94)	≥ 0.80 (≥ 0.88)	≥ 0.65 (≥ 0.72)
Snow			≥ 0.65 (≥ 0.72)	
Snow in severe conditions	≥ 0.85 (≥ 0.94)	≥ 0.85 (≥ 0.94)	≥ 0.65 (≥ 0.72)	≥ 0.65 (≥ 0.72)
Special			≥ 0.65 (≥ 0.72)	

Place of test: L'Albornar (Santa Oliva)

Date of test: 01/04/2015



Alejandro Clara Requena  
HOMOLOGATION ENGINEER

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IDIADA Automotive Technology, S.A. N.I.F. A43581610

CV20120929

IDIADA

ANNEX 3



**REPORT N° CV19100677****UN/ECE REGULATION 117R02 RELATED TO ROLLING RESISTANCE**

Applicant : OTANI RADIAL CO., LTD.  
96 MOO 3 RIMKLONG BANRAI ROAD,  
BANGKEAW, NAKORNCHAI SRI,  
NAKORNPATTHOM, 73120, THAILAND

Manufacturer : OTANI RADIAL CO., LTD.  
96 MOO 3 RIMKLONG BANRAI ROAD,  
BANGKEAW, NAKORNCHAI SRI,  
NAKORNPATTHOM, 73120, THAILAND

Tyre class : C3

Category of use : Snow

Traction tyre : No

Brand name / Trade mark : OTANI

Trade description/ Commercial name : OH-204

Tyre size : 265/70R19.5 143/141J

Place and date of issue : L'Albornar, Santa Oliva (Tarragona), 28/10/2019

CONCLUSIONS: The sample of the family has been tested according to the technical prescriptions with regard to "rolling resistance" pursuant to UN/ECE REGULATION 117R02.  
The characteristics of the tested sample are detailed in the annex to the test report.

Performed by:



Alejandro Clara Requena  
HOMOLOGATION ENGINEER

Revised by:



Ignacio Lafuente Buil  
DEPARTMENT MANAGER

**ANNEX TO THE TEST REPORT**  
ROLLING RESISTANCE, REPORT N° CV19100677

**1. TEST DATA**

**1.1. Test tyre details**

1.1.1	Applicant	: OTANI RADIAL CO., LTD. 96 MOO 3 RIMKLONG BANRAI ROAD, BANGKEAW, NAKORNCHAI SRI, NAKORNPATHOM, 73120, THAILAND
1.1.2	Manufacturer	: OTANI RADIAL CO., LTD. 96 MOO 3 RIMKLONG BANRAI ROAD, BANGKEAW, NAKORNCHAI SRI, NAKORNPATHOM, 73120, THAILAND
1.1.3	Tyre class	: C3
1.1.4	Category of use	: Snow
1.1.5	Traction tyre	: No
1.1.6	Brand name / Trade mark	: OTANI
1.1.7	Trade description / Commercial name	: OH-204
1.1.8	Tyre size	: 265/70R19.5 143/141J
1.1.9	Load index / Corresponding mass $Q_r$ [kg]	: 143 / 2,725
1.1.10	Tyre structure	: Radial
1.1.11	Date code, other manufacturer markings	: 3619
1.1.12	Inflation pressure [kPa]	: 860
1.1.13	Test tyre internal reference	: HVI-1910/03480
1.1.14	Test rim	: 7.50 x 19.5
1.1.15	Test rim internal reference	: HVI-1210/362
1.1.16	Test rim material	: Steel

## 1.2. Test machine data

1.2.1 Identification : AMB-1000RRH

1.2.2 Drum diameter [mm] : 1,700

FULFILS / ~~NOT FULFILS~~

1.2.3 Surface : Smooth steel

1.2.4 Roughness [ $\mu\text{m}$ ] :  $\leq 6.3$

FULFILS / ~~NOT FULFILS~~

## 1.3. Test data

1.3.1 Measurement method : Torque

1.3.2 Test speed [km/h] : 60

C3: 60 km/h (J:100 km/h and lower or tyres not market with speed symbol and load symbol > to 121)

FULFILS / ~~NOT FULFILS~~

1.3.3 Load Index (LI) / Load [kg] : 143 / 2,725

1.3.4 Test load [N] : 22,708.2

C2/C3 (% of single load): 85 (\*)

(\*) as a percentage of single load, or 85 per cent of maximum load capacity for single application specified in applicable tyre standards manuals if not marked on tyre.

FULFILS / ~~NOT FULFILS~~

1.3.5 Test inflation pressure, initial [kPa] : 860

C2/C3: corresponding to maximum load capacity for single application (\*)

(\*): inflation pressure marked on sidewall, or if not market on sidewall, as specified in applicable tyre standards manuals corresponding to maximum load capacity for single application.

FULFILS / ~~NOT FULFILS~~

1.3.6 Distance from the tyre axis to the drum outer surface under steady state conditions (rL) : N.A.

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1.3.7 Ambient temperature  $T_{am}$  [°C] : 24.99

$$20.0 \leq T_{am} \leq 30.0$$

FULFILS / ~~NOT FULFILS~~

1.3.8 Skim test load [N] : 392.4

$$C3 \leq 500 \text{ N}$$

FULFILS / ~~NOT FULFILS~~

1.3.9 Input torque ( $T_t$ ) [Nm] : 160.24

1.3.10 Input skim test torque ( $T_{pl}$ ) [Nm] : 36.99

## 2. TEST RESULTS

2.1. Rolling resistance coefficient

2.1.1 Initial value (or average in the case of more than 1) [N/kN] : 6.39

2.1.2 Temperature corrected value [N/kN] : 6.39

2.1.3 Temperature and drum diameter corrected value [N/kN] : 6.22

**Rolling resistance coefficient  $C_r$  [N/kN] = 6.22**

2.2. Limit value [N/kN]

	Stage 1	Stage 2
C1	12.0	10.5
C2	10.5	9.0
C3	8.0	6.5

For "snow tyre for use in severe snow conditions", the limits shall be increased by 1 N/kN.

\* THE PRESENTED RESULTS REFER ONLY TO THE TESTED SAMPLE.

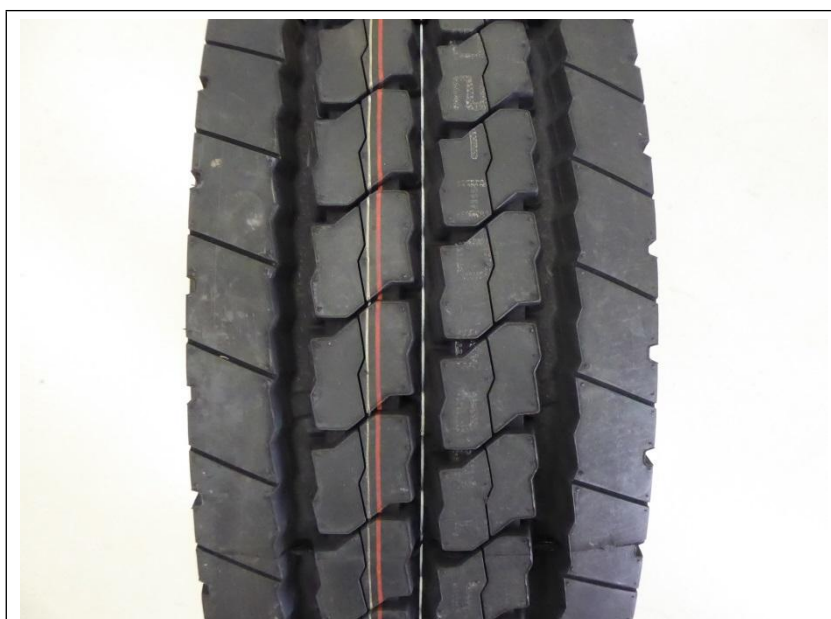
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### 3. TEST TYRE PICTURES



Picture 1. Sidewall



Picture 2. Tread pattern

Place of test: L'Albornar (Santa Oliva)

Date of test: 25/10/2019

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