



## THE NETHERLANDS (NEDERLAND)





#### COMMUNICATION

# Concerning (1):

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- approval-withdrawn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

of a type of tyre with regard to "rolling sound emission level" and "adhesion performance on wet surfaces" pursuant to Regulation number 117.

Approval number: E4-117R-011591 S

Extension number: 00

Approval mark:



- 1. Manufacturer's name and address(es)
- 2. If applicable, name and address of manufacturer's representative

: not applicable

"Tyre class" and "category of use" of 3. the type of tyre

: Class C1/ Class C2 /-Class C3 normal/snow/special

Brand(s) name(s) and/or Trade 4. description(s) of the type of tyre : ATHOS; HG2206

Technical service and, where 5. appropriate, test laboratory approved for purposes of approval or of verification of conformity tests

: TÜV Rheinland Kraftfahrt GmbH Technologiezentrum Verkehrssicherheit Typprüfstelle Fahrzeuge/Fahrzeugteile Am Grauen Stein D-51105 Köln (Poll)



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Vehicle Approval and Information

6. Sound level of the representative tyre : 75 dB(A) size, see Paragraph 2.5. of Regulation number 117, as per item 1.6. of the test report, at reference speed of 70/80 km/h<sup>(1)</sup>.

7. Wet adhesion level of the representative tyre size, see Paragraph 2.5. of Regulation number 117, as per item 7. of the test report in the Appendix to Annex 5, using vehicle or trailer method (1).

8. Number of report issued by that : 86-R117-452/09 service

Date of report issued by that service : July 31, 2009

10. Reason(s) of extension (if applicable) : not applicable

11. Any remarks : ---

12. Place : Zoetermeer

13. Date : 13-AUG-2009

14. Signature :



- 15. Annexed to this communication are:
- 15.1. A list of documents in the approval file deposited at the Administration services having delivered the approval and which can be obtained upon request.
- 15.2. A list of tread-pattern designations: Specify for each trademark or brand name and trade description the list of tyre size designations adding, in case of Class C1 tyres, the mark "reinforced" (or "extra load") or the speed symbol of snow tyres, if so required by Paragraph 3.1. of this Regulation.

<sup>(1)</sup> Strike out what does not apply.

# List of tyre size

Brand name(s) or Trade mark(s): ATHOS

:

:

Tread pattern

: HG2206

Tyre size	Approval No.	Limit dB(A)	
295/80R22.5 152/148 M	E4-0021472		
315/80R22.5 156/150 M	E4-0021470	76	
315/70R22.5 154/150 M	E4-0021474		

**Test Size** 

315/70R22.5 154/150 M;

Because of

Widest section width;

Lowest aspect ratio;

Biggest rim size





# Drawing of the tread pattern (for measured tyre)

Manufacturer name Pattern name Tyre Size Market	HG2206 315/70R22.5 154/150 M EU/US				
Pitch number Pitch ratio	56 1.00				
Void volume [%] Width: main grooves [mm] Depth: center groove [mm] Depth: shoulder groove [mm]	28 15/14/14/15 16/16 16/16				
Pattern					



Test Report No.: 86-R117-452/09



Manufacturer

Type

HG2206

#### TEST REPORT

according to ECE-Regulation

# UNIFORM PROVISIONS CONCERNING THE APPROVAL OF TYRES WITH REGARD TO ROLLING SOUND EMISSIONS AND TO ADHESION ON WET SURFACES

#### **ECE-R117**

including all amendments up to Amend. 01, Corr. 2

Previously granted		
ECE – certificate	:	

Structure of report:

0. Tire noise test description

1. General information

2. Test data

3. Remarks concerning tested object(s)

4. Appendices

5. Statement of conformity



Test Report No.: 86-R117-452/09



Manufacturer

Type

HG2206

#### 0. Tire noise test description

0.1. Test facilities

- : The test facilities are in compliance with the requirements of the regulation.
- 0.2. Noise measurement
- : The test course satisfies the requirements of ISO 10844:1994 and the test surface is dry and clean for all measurement.

Measurement equipment corresponds to Type 1 of IEC 60651.

The microphones are arranged at a distance of 7.5m±0.05m to the centreline at a height of 1.20m±0.02m above the measurement surface. A suitable windscreen may be fitted to the microsphone provided that account is taken of its effect on the sensitivity and directional characteristics of the microphone.

The microphones were calibrated prior to commencement.

Wind speed at the microsphone height  $\leq 5 \text{ m/s}$ .

Ambient noise is at least 10 dB (A) less than the measured tyre-road sound emission.

Prior to actual measurement, the tires were run in for about 100 km on public roads, to remove mold-release edges, mold discharges etc. from the tires.

The tyres fitted to the test rotate in the same direction as when they were run-in. Prior to testing tyres are warmed up by running under test conditions.

#### 0.3. Test results

: The vehicle was rolled across the test course in neutral gear with the engine switched off. The maximum sound pressure levels in dB (A) right and left of the vehicle were recorded together with the speed.

This measurement was carried out 8 times at different speeds; the different speeds were distributed as evenly as possible across the defined speed range.

Regression analysis is used to establish the relationship between the results and the reference speed.



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Manufacturer

Туре

HG2206

#### Part 1

#### 1. General information

1.1. Type approval authority or Technical Service

: TÜV Rheinland Kraftfahrt GmbH

Technologiezentrum Verkehrssicherheit Typprüfstelle Fahrzeuge/Fahrzeugteile

Am Grauen Stein D-51105 Köln (Poll)

1.2. Name and address of the manufacturer

.

1.3. Brand name(s), Trade description(s) or Trade mark(s)

: ATHOS; HG2206

1.4. Tyre Class

: Class C1/ Class C2 / Class C3

1.5. Category of use

normal/snow/special

1.6. Sound level according to paras. 4.4. and 4.5. of Annex 3 at reference speed of 70/80 km/h 75 dB(A)

1.7. Comments (if any)

: The results of the test refer exclusively to the object(s) mentioned under paragraph 2.1.4.1. of this report.



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Manufacturer

Type

HG2206

#### Part 2

2.1. Test data

Test tyre type

2.1.1.

Date of test

: July 24, 2009

2.1.2. Test vehicle

Manufacturer

Vehicle name

: BJ3076DCPFA-5 (ROWOR II 140)

VIN

: LVBDCPFA37W102839

Transmission

: manual

ENG displacement

: 4257 cc

2.1.2.1. Test vehicle wheelbase

: 3900 mm(<5000mm for C2 & C3)

2.1.3. Location of test track : Proving Ground for Highway and Traffic of the Ministry of

Communications

Dadushe, Tongzhou District,

Beijing 101103 P.R. China

2.1.3.1. Date of track certification to ISO

10844:1994

: November 04, 2008

2.1.3.2. Issued by

: Highway Inspection Center of China Ministry of Communications

2.1.3.3. Method of certification

: Residual void content, Sound absorption coefficient, Texture depth

2.1.4. Tyre test details

2.1.4.1.

Tyre size designation

: 315/70R22.5 154/150M

Manufacture date code

: 2709

Category of use

: normal

Indication

: not applicable

ECE Approval No.

: E4-0021474

2.1.4.2. Tyre service description

: not applicable

2.1.4.3. Reference inflation pressure

: 900 kPa



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Manufacturer

Type

HG2206

#### 2.1.4.4. Test data

Reference load

: 3750 kg

	Front left	Front right	Rear left	Rear right
Test mass (kg)	2470	2420	2845	2855
Tyre load index (%)	65.9%	64.5%	75.9%	76.1%
Inflation pressure (cold) (kPa)	570	570	700	700

2.1.4.5. Test rim size

: 9.00x22.5

2.1.4.6. Temperature measurement sensor

type

: NK5919(air) UT30C (track)

2.1.5. Valid Test results

.

Running No.	Speed km/h	Direction of run	Sound Level Measured dB(A)		Air Temp.	Track Temp.	Sound Level Measured dB(A)		Comments
			Left	Right	°C	°C	Left Temp.	Right Temp. correction	
1	62.25	North to South	74.7	74.2	28.7	33			
2	64.32	North to South	75.7	75.6	28.4	33			
3	65.97	North to South	76.1	75.4	28.0	33			
4	68.39	North to South	77.1	77.2	28.6	33			
5	72.40	South to North	76.5	77.5	28.9	33			
6	74.82	South to North	78.1	77.7	28.4	33			
7	75.99	South to North	78.7	78.3	28.9	33			
8	77.69	South to North	78.1	78.9	28.1	33			
Limit value	60~80				5 ~ 40	5 ~ 50			

2.1.5.1. Regression line slope

: a=39.39

2.1.5.2. Sound level after temperature correction according to

: 76.86 dB(A)

paragraph 4.3. of Annex 3

2.1.5.3. Final result according to paragraph 4.4. and 4.5. of

: 75 dB(A)

Annex 3

Limit Value for C1 / C2 / C3

: 76 dB(A)



Test Report No.: 86-R117-452/09



Manufacturer

Туре

HG2206

#### 3. Remark concerning tested object(s)

All versions of the type as stated in the information document are covered with the tested version(s) and test object(s) respectively.

#### 4. Appendices

0 List of modifications

Information document no.

: HG2206-S3-00

#### 5. Statement of conformity

The information folder and the type described there comply with the requirements in the above mentioned regulation.

The test laboratory is accredited for the above mentioned tests by the accreditation body of the RDW, Vehicle Technology and Information Centre, as the competent Administrative Department for the Netherlands; Accreditation No: RDW-99050014-05.

The test report comprises the pages 1 to 7 and shall not be reproduced except in full without the written approval of the test laboratory.

Cologne, July 31, 2009

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Dipl.-Ing. Li Zhitao



Test Report No.: 86-R117-452/09



Manufacturer	1

Type

HG2206

List of modifications

Appendix 0

Correction of

Modification of

Addition of

Deletion of

