

Inspection report regarding the tyre/road noise emission of a tyre in accordance with the Council Directive, Annex V to Directive 92/23/EEC, as last amended by Directive 2005/11/EC and ECE Regulation no. 117.

Part1-Report

1. Type approval authority or Technical Service : RDW
2. Name and address of applicant : Hankook Tire China Regional Headquarters
3F, Xingyuan building, 410 Guiping Road,
200233, Shanghai, China
3. Test report No. : K055-A0-0408-0588
4. Manufacturer and Brand Name or Trade description : HANKOOK H714, KINGSTAR H714
SPORT IV H714
5. Tyre Class (C1, C2 or C3) : C1
6. Category of use : normal or snow
7. Sound level according to paras. 4.4. and 4.5. of Annex 3 of : 71 dB(A) / 80 km/h
ECE R 117 and paras. 4.4. and 4.5. of Annex V appendix1
of the Directive 92/23 EC at reference speed of 70 or
80km/h
8. Tyre/Road Noise level according to paras. 6.1.1. through : Limit value expressed in dB(A) according to
paras 6.1.3. of ECE R 117 and paras.4.2.1 through 4.2.3 of Regulation & Directive :
Annex V of the Directive 92/23 EC at reference speed of ~~C1 category ;~~
70 or 80km/h (strike out what does not apply) ~~** 145 and lower 72 dB(A), over 145 up to 165 73 dB(A),
over 165 up to 185 74 dB(A), over 185 up
to 215 75 dB(A), over 215 76 dB(A) * C1a 71(72) dB(A),
C1b 72(73) dB(A), C1c 73(74) dB(A),
C1d 75 dB(A), C1e 76 dB(A)
XL/+ 1 dB(A) & Special/+ 2dB(A)
* () means for 92/23/EEC ** () means for ECE R117~~
~~C2 category ;
Normal 75 dB(A), Snow 77 dB(A), Special 78 dB(A)
C3 category ;
Normal 76 dB(A), Snow 78 dB(A), Special 79 dB(A)~~
9. Comments (if any) : ~~The actual test of the tyre was not required and results
of the previous tests are still valid.~~
10. Date of test report : June 02, 2008
11. Signature :




Part2-Test data

- 1. Date of test: : April 24, 2008
- 2. Test vehicle (Make, model, year, modifications, etc.) : HYUNDAI New EF SONATA
VIN: KMHEN41BP1A461687/2001
- 2.1. Test vehicle wheelbase : 2730 mm
- 3. Location of test track : GTRACK
#433 Myungam-ri, Jewon-Myun, Geumsan-gun, Chungnam, 312-824, Korea
- 3.1 Date of track certification to ISO 10844:1994 : April 13, 2007
- 3.2. Issued by : RDW TCL/DB/2003-1, K038-A1-0306-0208
- 3.3. Method of certification : Residual void content, Sound absorption coefficient, Texture depth
- 4. Tyre test details
- 4.1. Tyre size designation/DOT Number : 215/65R15 / 1308
- 4.2. Tyre service description : Standard / ~~Reinforced~~
- Load Index : 96
- Speed Category : H
- 4.3. Reference inflation pressure : 250 kPa
- 4.4. Test data

	Front left	Front right	Rear left	Rear right
Test mass (kg)	508	508	490	490
Tyre load index (%)	71.5	71.5	69.0	69.0
Inflation pressure (cold)(kPa)	180	180	170	170

- 4.5. Test rim width code : 6.5J x 15
- 4.6. Temperature measurement sensor type : Digital Thermometer(KESTREL K2000)

5. Valid test results

Run No.	Speed km/h	Direction of run	Sound level left 2/ measured dB(A)	Sound level right 2/ measured dB(A)	Air temp. C	Track temp. C	Sound level left 2/ temp.corrected dB(A)	Sound level right 2/ temp.corrected dB(A)	Comments
1	71.8	North-South	70.1	73.6	12.9	29.0	70.4	73.8	-
2	73.1	North-South	70.4	74.0	12.1	28.0	70.6	74.3	-
3	75.9	North-South	70.8	74.1	12.6	26.0	70.9	74.2	-
4	77.6	North-South	71.3	73.6	11.5	28.0	71.5	73.8	-
5	81.7	North-South	71.6	74.7	13.0	29.0	71.9	75.0	-
6	83.2	North-South	72.0	74.8	14.1	29.0	72.3	75.1	-
7	87.0	North-South	72.4	74.7	12.0	28.0	72.7	74.9	-
8	85.2	North-South	72.4	75.0	11.4	29.0	72.7	75.2	-

5.1. Regression line slope : a = -61.49

5.2. Sound level after temperature correction-according to para.4.3 of Annex 3 of ECE R117 and para. 4.3 of Annex V appendix 1 of the Directive 92/23 : 72.89 dB(A)

5.3. The final result of sound level according to para.4.4. of annex 3 of ECE R117 and para. 4.4 of Annex V appendix 1 of the Directive 92/23 : 71 dB(A)

List of modifications

Correction of : - --

Modification of : - --

Addition of : - --

Deletion of : - --

Inspection report regarding the tyre/road noise emission of a tyre in accordance with the Council Directive, Annex V to Directive 92/23/EEC, as last amended by Directive 2005/11/EC and ECE Regulation no. 117.

Part1-Report

- | | | | |
|-----|--|---|--|
| 1. | Type approval authority or Technical Service | : | RDW |
| 2. | Name and address of applicant | : | Hankook Tire China Regional Headquarters
3F, Xingyuan building, 410 Guiping Road,
200233, Shanghai, China |
| 3. | Test report No. | : | K055-A0-0408-0588-1 |
| 4. | Manufacturer and Brand Name or Trade description | : | HANKOOK H714, KINGSTAR H714
SPORT IV H714 |
| 5. | Tyre Class (C1, C2 or C3) | : | C1 |
| 6. | Category of use | : | normal or snow |
| 7. | Sound level according to paras. 4.4. and 4.5. of Annex 3 of :
ECE R 117 and paras. 4.4. and 4.5. of Annex V appendix1
of the Directive 92/23 EC at reference speed of 70 or
80km/h | : | 69 dB(A) / 80 km/h |
| 8. | Tyre/Road Noise level according to paras. 6.1.1. through
paras 6.1.3. of ECE R 117 and paras.4.2.1 through 4.2.3 of
Annex V of the Directive 92/23 EC at reference speed of
70 or 80km/h (strike out what does not apply) | : | Limit value expressed in dB(A) according to
Regulation & Directive :
C1 category ;
** 145 and lower 72 dB(A), over 145 up to 165 73 dB(A),
over 165 up to 185 74 dB(A), over 185 up
to 215 75 dB(A), over 215 76 dB(A) * C1a 71(72) dB(A),
C1b 72(73) dB(A), C1c 73(74) dB(A),
C1d 75 dB(A), C1e 76 dB(A)
XL/+ 1 dB(A) & Special/+ 2dB(A)
* () means for 92/23/EEC ** () means for ECE R117
C2 category ;
Normal 75 dB(A), Snow 77 dB(A), Special 78 dB(A)
C3 category ;
Normal 76 dB(A), Snow 78 dB(A), Special 79 dB(A) |
| 9. | Comments (if any) | : | <u>The actual test of the tyre was not required and results
of the previous tests are still valid.</u> |
| 10. | Date of test report | : | June 02, 2008 |
| 11. | Signature | : | |




Part2-Test data

- 1. Date of test: : April 24, 2008
- 2. Test vehicle (Make, model, year, modifications, etc.) : HYUNDAI AVANTE XD
VIN: KMHDN41DP4U877452/2004
- 2.1. Test vehicle wheelbase : 2650 mm
- 3. Location of test track : GTRACK
#433 Myungam-ri, Jewon-Myun, Geumsan-gun, Chungnam, 312-824, Korea
- 3.1 Date of track certification to ISO 10844:1994 : April 13, 2007
- 3.2. Issued by : RDW TCL/DB/2003-1, K038-A1-0306-0208
- 3.3. Method of certification : Residual void content, Sound absorption coefficient, Texture depth
- 4. Tyre test details
- 4.1. Tyre size designation/DOT Number : 195/60R14 / 1108
- 4.2. Tyre service description : Standard / ~~Reinforced~~
- Load Index : 86
- Speed Category : T
- 4.3. Reference inflation pressure : 250 kPa
- 4.4. Test data

	Front left	Front right	Rear left	Rear right
Test mass (kg)	418	418	338	338
Tyre load index (%)	71.5	71.5	69.0	69.0
Inflation pressure (cold)(kPa)	200	200	150	150

- 4.5. Test rim width code : 6.0J x 14
- 4.6. Temperature measurement sensor type : Digital Thermometer(KESTREL K2000)

5. Valid test results

Run No.	Speed km/h	Direction of run	Sound level left 2/ measured dB(A)	Sound level right 2/ measured dB(A)	Air temp. C	Track temp. C	Sound level left 2/ temp.corrected dB(A)	Sound level right 2/ temp.corrected dB(A)	Comments
1	71.5	North-South	67.8	69.3	15.2	28.0	68.0	69.5	-
2	73.8	North-South	68.3	69.8	16.3	27.0	68.6	70.1	-
3	75.5	North-South	68.5	70.1	16.0	27.0	68.7	70.3	-
4	77.9	North-South	69.2	70.2	16.8	28.0	69.4	70.5	-
5	81.5	North-South	69.5	71.3	16.5	27.0	69.7	71.5	-
6	83.0	North-South	70.3	71.6	15.9	27.0	70.5	71.8	-
7	85.2	North-South	70.3	71.4	16.3	28.0	70.6	71.7	-
8	87.7	North-South	70.5	71.9	16.5	27.0	70.8	72.1	-

5.1. Regression line slope : a = -49.45

5.2. Sound level after temperature correction-according to para.4.3 of Annex 3 of ECE R117 and para. 4.3 of Annex V appendix 1 of the Directive 92/23 : 70.09 dB(A)

5.3. The final result of sound level according to para.4.4. of annex 3 of ECE R117 and para. 4.4 of Annex V appendix 1 of the Directive 92/23 : 69 dB(A)

List of modifications

Correction of : - --

Modification of : - --

Addition of : - --

Deletion of : - --



RDW

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



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 pursuant to Regulation number 117.

Approval number: E4-117R-000347

Extension number: 00

Approval mark:



000347 S

- | | | |
|----|--|---|
| 1. | Manufacturer's name and address(es) | : Hankook Tire China Regional Headquarters
3F, Xingyuan building, 410 Guiping Road,
200233, Shanghai, China |
| 2. | If applicable, name and address of
manufacturer's representative | : not applicable |
| 3. | "Tyre class" and "category of use" of the
type of tyre | : C1 / normal or snow |
| 4. | Brand(s) name(s) and/or Trade
description(s) of the type of tyre | : HANKOOK H714, KINGSTAR H714
SPORT IV H714 |
| 5. | Technical service and, where appropriate,
test laboratory approved for purposes of
approval or of verification of conformity
tests | : TÜV NORD Mobilität GmbH & Co. KG
Institut für Fahrzeugtechnik und Mobilität
Adlerstrasse 7, D-45307 Essen |
| 6. | Sound level of the representative tyre size, see Paragraph 2.5. of Regulation number 117, as per item
7. of the test report: 71 dB(A) at reference speed of 70/80 km/h ⁽¹⁾ . | |
| 7. | Number of report issued by that service | : K055-A0-0408-0588 |
| 8. | Date of report issued by that service | : June 02, 2008 |
| 9. | Reason(s) of extension (if applicable) | : not applicable |





Postbus 777
2700 AT Zoetermeer
The Netherlands

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Fax +31 79 345 80 33
www.rdw.nl

Vehicle Approval and Information

10. Any remarks :
11. Place : Zoetermeer
12. Date : 9-JUN-2008
13. Signature


F.E. Plancius



14. Annexed to this communication are: Information folder no; JPQA-07A1001
- 14.1. A list of documents in the approval file deposited at the Administration services having delivered the approval and which can be obtained upon request.
- 14.2. A list of tread-pattern designations: Specify for each trademark or brand name and trade description the list of tyre size designations adding, in the case of Class C1 tyres, the mark "Reinforced" or "Extra Load", if applicable.

⁽¹⁾ Strike out what does not apply.



Hankook Tire China Regional Headquarters
(Hankook Tire China Co.,Ltd. Shanghai Office)
3F,Xingyuan building
410 Guiping Road 200233,Shanghai,China
Phone : 86-573-82161488 Fax : 86-573-82161559

Date: MAY. 10, 2008

**INFORMATION DOCUMENT No. JPQA-07A1001 RELATING TO EC TYPE APPROVAL FOR A TYPE
OF TYRE RELATING TO TYRE/ROAD NOISE EMISSION
(Annex V to Directive 2005/11/EC & Regulation. 117)**

1. GENERAL

- 1.1 Manufacturer's name : Hankook Tire China Regional Headquarters
(Hankook Tire China Co.,Ltd. Shanghai Office)
- 1.2 Name and address of applicant : Hankook Tire China Regional Headquarters
(Hankook Tire China Co.,Ltd. Shanghai Office)
3F,Xingyuan building
410 Guiping Road 200233,Shanghai,China
- 1.3 Address(es) of manufacturing plant(s) : Plant 1
JIANGSU HANKOOK TIRE CO.,LTD.
1# South Hantai Road ,Huai'an Economic
Development Zone,223002,Jiangsu Province,
China
Plant 2
HANKOOK TIRE CHINA CO.,LTD.
Dongfang Road, Jiaxing Economic Development
Zone, zhejiang province, China
- 1.4 Brand name(s), Trade description(s) or Trade mark(s) : HANKOOK / KINGSTAR / SPORT IV

2. TYRES

- 2.1 Tyre classification (class C1, C2 or C3) : Class C1
- 2.2 Category of use (normal, snow or temporary use) : normal / snow
- 2.3 Details of the major features, with respect to the effects : H714 – see Drawing No.200804-PBN-H714
on tyre/road noise emission, of the tread pattern(s) to
be used on the designated range of tyre sizes. This
may be by drawing, photograph or description but must
be sufficient to allow the type approval authority or
technical service to determine whether any subsequent
changes to the major features will adversely affect the
tyre/road noise emission
- 2.3 Tyre structure (Bias, Bias-belted or Radial) : Radial
- 2.5 List of tread-pattern designations : see the attached tyre type list

YOO YUN SOON (Team Manager)
Quality Assurance Team
Hankook Tire China Regional Headquarters
(Hankook Tire China Co.,Ltd. Shanghai Office)



Pattern of Tires

H714

SIZE	Limit (dB)
135/80R13T 70T	72
145/70R13T 71T	
145/80R12T 74T	
145/80R13T 75T	
155/65R13T 73T	73
155/65R14T 75T	
155/70R13T 75T	
155/80R13T 79T	
P155/80R13S 79S	
165/65R13T 77T	
165/65R14T 79T	
165/70R13T 79T	
165/70R14T 81T	
165/80R13T 83T	
175/65R13T 80T	
175/65R14H 82H	
175/65R14T 82T	
175/70R13T 82T	
175/70R14T 84T	
175/80R14T 88T	
185/60R14H 82H	
185/60R14T 82T	
185/65R14H 86H	
185/65R14T 86T	
185/65R15H 88H	
185/65R15T 88T	
185/70R13T 86T	
185/70R14H 88H	
185/70R14T 88T	
P185/70R14S 87S	
185/75R14H 89H	
P185/75R14S 89S	
P185/80R13S 90S	



195/60R14H	86H	75	
195/60R15H	88H		
195/65R14H	89H		
195/65R15H	91H		
195/65R15T	91T		
195/70R14T	91T		
P195/70R14S	90S		
P195/75R14S	92S		
205/60R15H	91H		
P205/60R15T	90T		
P205/60R16H	91H		
205/65R15H	94H		
P205/65R15T	92T		
P205/65R16T	94T		
205/70R14T	95T		
P205/70R14S	93S		
P205/70R15S	95S		
P205/75R14S	95S		
P205/75R15S	97S		
P215/60R15H	93H		
P215/60R15T	93T		
P215/60R16H	94H		
P215/60R16T	94T		
215/65R14H	94H		
215/65R15H	96H		
P215/65R16T	96T		
P215/70R14S	96S		
P215/70R15S	97S		
P215/75R14S	98S		
P215/75R15S	100S		
P225/60R16H	97H		76
P225/60R16T	97T		
P225/70R15S	100S		
P225/75R15S	102S		
P235/60R16H	99H		
P235/75R15S	105S		

Test Size : 215/65R15 96H



Reason of choice : Widest
~~Lowest aspect ratio~~
Biggest rim size

Test Size : 195/60R14 86T

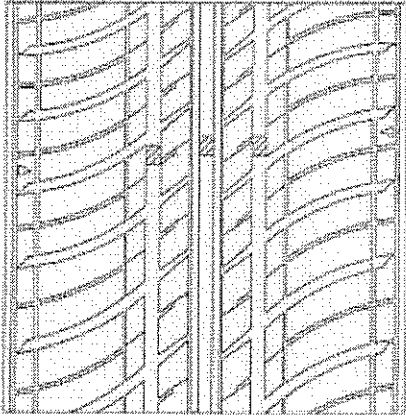
Reason of choice : ~~Widest~~
Lowest aspect ratio
~~Biggest rim size~~



Drawing No.: 200804-PBN-H714

Date : 2008-4-21

Drawing of the tread pattern (Mesured tire)

Manufacture's name	HanKOOK Tire China Regional Headquarters (HanKOOK Tire China Co., Ltd. Shanghai office)
Pattern name	H714
Tire size	195/60R14 86H
Max. Load	530Kg
Pitch number	57
Pitch ratio (Max./Min.)	1.32
Groove area ratio (%)	34.80%
Width : main grooves (mm)	8-8-8
Depth : center grooves (mm)	7.8
Depth : shoulder grooves (mm)	7.8
Pattern	



Drawing No.: 200804-PBN-H714

Date : 2008-4-21

Drawing of the tread pattern (Mesured tire)

Manufacture's name	HanKOOK Tire China Regional Headquarters (HanKOOK Tire China Co., Ltd. Shanghai office)
Pattern name	H714
Tire size	215/65R15 96H
Max. Load	710kg
Pitch number	59
Pitch ratio (Max./Min.)	1.33
Groove area ratio (%)	34.80%
Width : main grooves (mm)	8.8-8-8.8
Depth : center grooves (mm)	8.2
Depth : shoulder grooves (mm)	8.2
Pattern	