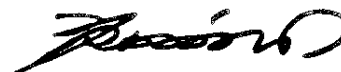


Inspection report regarding the tyre/road noise emission of a tyre in accordance with the Council Directive, Annex V to Directive 92/23/EEC, as last amended by Directive 2005/11/EC and ECE Regulation no. 117.

Part1-Report

- | | | | |
|-----|---|---|--|
| 1. | Type approval authority or Technical Service | : | RDW |
| 2. | Name and address of applicant | : | Hankook Tire Co., Ltd.
#647-15, Yoksam-dong, Kangnam-ku
Seoul, 135-723, Korea |
| 3. | Test report No. | : | K055-A0-0508-0748 |
| 4. | Manufacturer and Brand Name or Trade description | : | HANKOOK K105, AURORA K105 |
| 5. | Tyre Class (C1, C2 or C3) | : | C1 |
| 6. | Category of use | : | normal |
| 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 | : | 70 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 |
| 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 16, 2008 |
| 11. | Signature | : | |




Part2-Test data

- 1. Date of test: : May 15, 2008
- 2. Test vehicle (Make, model, year, modifications, etc.) : HYUNDAI TUSCANI
VIN: **WBAEV33435KL63957/2005**
- 2.1. Test vehicle wheelbase : 2530 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 : 245/45R16 / 1608
- 4.2. Tyre service description : Standard / ~~Reinforced~~
- Load Index : 94
- Speed Category : W
- 4.3. Reference inflation pressure : 250 kPa
- 4.4. Test data

	Front left	Front right	Rear left	Rear right
Test mass (kg)	479	479	464	464
Tyre load index (%)	71.5	71.5	69.2	69.2
Inflation pressure (cold)(kPa)	180	180	170	170

- 4.5. Test rim width code : 8.0J x 16
- 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	69.45	70.23	23.2	45	70.2	71.0	-
2	73.0	North-South	69.98	70.28	23.6	46	70.8	71.1	-
3	75.4	North-South	70.07	71.48	23.3	46	70.9	72.3	-
4	77.0	North-South	70.13	71.44	22.8	45	70.9	72.2	-
5	82.6	North-South	70.85	72.65	24.1	45	71.6	73.4	-
6	84.1	North-South	70.99	72.18	22.2	44	71.7	72.9	-
7	86.8	North-South	71.7	72.86	23.1	45	72.5	73.6	-
8	88.7	North-South	72.05	73.77	22.7	44	72.8	74.5	-

5.1. Regression line slope : a = -52.25

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 : 71.99 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 : 70 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-000390

Extension number: 00

Approval mark:



000390 S

- | | | |
|-----|---|---|
| 1. | Manufacturer's name and address(es) | : Hankook Tire Co., Ltd.
#647-15, Yoksam-dong, Kangnam-ku
Seoul, 135-723, Korea |
| 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 |
| 4. | Brand(s) name(s) and/or Trade description(s) of the type of tyre | : HANKOOK K105, AURORA K105 |
| 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: 70 dB(A) at reference speed of 70/80 km/h ⁽¹⁾ . | |
| 7. | Number of report issued by that service | : K055-A0-0508-0748 |
| 8. | Date of report issued by that service | : June 16, 2008 |
| 9. | Reason(s) of extension (if applicable) | : not applicable |
| 10. | Any remarks | : |

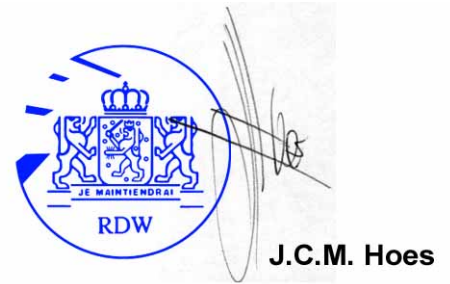


Postbus 777
2700 AT Zoetermeer
The Netherlands

Tel +31 79 345 81 43
Fax +31 79 345 80 33
www.rdw.nl

Vehicle Approval and Information

11. Place : Zoetermeer
12. Date : 24-JUN-2008
13. Signature :



14. Annexed to this communication are: Information folder no; P2008-A05-21
- 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 CO., LTD.

647-15 Yeoksam-dong, Gangnam-gu, Seoul 135-723 Korea
Phone : 82-2-2222-1000 Facsimile : 82-2-2222-1100

Date: May . 21, 2008

**INFORMATION DOCUMENT No. P2008-A05-21 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 Mnufacturer's name : HANKOOK TIRE CO., LTD.
- 1.2 Name and address of applicant : HANKOOK TIRE
#647-15 Yoksam-dong, Kangnam-ku
Seoul, 135-723, Korea
- 1.3 Address(es) of manufacturing plant(s) : Plant 1
#100 Moksang-dong, Teaduck-Gu,
Deajeon, 306-120, Korea
Plant 2
#433 Myungam-ri, Jewon-Myun, Geumsan-gun,
Chungnam, 312-824, Korea
- 1.4 Brand name(s), Trade description(s) or Trade mark(s) : HANKOOK, AURORA,

2. TYRES

- 2.1 Tyre classification (class C1, C2 or C3) : Class C1
- 2.2 Category of use (normal, snow or specail) : normal
- 2.3 Details of the major features, with respect t the effects : K105 – see Drawing No. 200804-PBN- K105
on tyre/road noise emission, of the tread pattern(s) to
be used on the disignated 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



K. T. Kim

K. T. Kim (G. Manager)
Quality Assurnce Team

Pattern of Tires

K105

SIZE		Limit (dB)	
175/55R15T	77T	74	
175/60R15V	81V		
185/55R14H	80H		
185/55R14V	80V		
185/55R15H	82H		
185/65R15V	88V		
185/55R15V XL	86V		75
195/45R14V	77V		
195/45R16V	84V		
195/50R15H	82H		
195/50R15V	82V		
195/55R16V	87V		
195/55RF16V	87V		
195/60R15V	88V		
195/65R15H	91H		
195/65R15T	91T		
195/65R15V	91V		
205/45R17H	88H		
205/50R15V	86V		
205/50R16H	87H		
205/50R16V	87V		
205/55R16H	91H		
205/55R16V	91V		
205/55RF16W	91W		
205/60R15V	91V		
205/60R15W	91W		
205/65R15V	95V		
205/65R15W	95W		
215/55R16H	93H		
215/55R16V	93V		
215/55R17H	94H		
215/55R17V	94V		



215/55R17W	94W
215/60R15V	94V
215/60R16H	95H
195/45R15V XL	82V
195/45R16V XL	84V
195/50R16V XL	88V
195/55R15V XL	89V
205/50R16W XL	91W
205/50R17W XL	93W
205/55R15V XL	92V
205/55R16W XL	94W
215/55R16W XL	97W
225/45R16W	89W
225/45R17W XL	94W
225/50R15W	91W
225/50R16V	92V
225/50R16W XL	96W
225/50R17W XL	98W
225/55R16V	95V
225/55R16W	95W
225/55R16W XL	99W
225/55R17V	97V
225/55R17V XL	101V
225/55R17W	97W
225/55R17W XL	101W
225/60R15W	96W
235/45R17V	94V
235/45R17W XL	97W
235/55R17W XL	103W
245/45R16W	94W

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Test Size : 245/45R16 94W

Reason of choice : Widest
 Lowest aspect ratio
 Biggest rim size

Drawing No.: 200804-PBN-K105

Date : 2008-04-21

Drawing of the tread pattern (Measured tire)

Manufacture's name	HANKOOK TIRE CO., LTD.
Pattern name	K105
Tire size	245/45R16W
Max. Load	670
Pitch number	74
Pitch ratio (Max./Min.)	1.43
Groove area ratio (%)	33.82%
Width : main grooves (mm)	(Inside) 11.0 / 10.4 / 12.0 / 12.0 (Outside)
Depth : center grooves (mm)	8.37
Depth : shoulder grooves (mm)	7.64
Pattern 