



MINISTERIO
DE INDUSTRIA
Y TURISMO

SECRETARÍA DE ESTADO DE
INDUSTRIA

DIRECCIÓN GENERAL DE ESTRATEGIA
INDUSTRIAL Y DE LA PEQUEÑA Y
MEDIANA EMPRESA



(1)

E9*117R02/14*1498*00

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Relativa a / Concerning:

- homologación de tipo / *APPROVAL GRANTED* ⁽²⁾
- ~~-extensión de homologación de tipo / *APPROVAL EXTENDED* ⁽²⁾~~
- ~~-denegación de homologación de tipo / *APPROVAL REFUSED* ⁽²⁾~~
- ~~-retirada de homologación de tipo / *APPROVAL WITHDRAWN* ⁽²⁾~~
- ~~-producción definitivamente abandonada / *production definitively discontinued* ⁽²⁾~~

de un tipo de neumático en lo que se refiere al “nivel de emisión de ruido de rodadura” y/o a la “adherencia en superficie mojada” y/o a la “resistencia a la rodadura”, en virtud al Reglamento No 117. / *of a type of tyre with regard to “rolling sound emission level” and/or adhesion on wet surfaces” and/or “rolling resistance” pursuant to Regulation No. 117.*

Número de homologación de tipo / *Approval No* ⁽³⁾: **E9*117R02/14*1498*00**

Nº de extensión / *Extension No.*: 00

Sufijos / *Suffixes* ⁽⁴⁾: **02S2WR2**

Motivos de la extensión / *Reason for extension*: Ver informe N° / *See test report No.* : N/A

- | | | |
|-------|--|---|
| 1. | Nombre y dirección del fabricante /
<i>Manufacturer's name and address</i> | : SHANDONG YONGSHENG RUBBER GROUP
CO., LTD.
South of Guangkai Road, Economic Development
Zone, Guangrao County
257335, Dongying (CHINA) |
| 2. | Nombre y dirección del representante del fabricante /
<i>Manufacturer's representative name and address</i> | : N/A |
| 3. | Clase de neumático /
<i>Tyre Class</i> | : C1 |
| 4. | Categoría de uso del tipo de neumático /
<i>Category of use of the type of tyre</i> | : normal / nieve / especial ⁽²⁾
normal / snow / special ⁽²⁾ |
| 4.1. | Neumático de nieve para uso en condiciones severas /
<i>Snow tyre for use in severe snow conditions</i> | : N/A / N/A |
| 4.1.1 | Ice grip tyre | : N/A / N/A |
| 4.2. | Neumático de tracción / <i>Traction tyre</i> | : N/A / N/A |
| 5. | Estructura del neumático / <i>Tyre structure</i> | : radial |
| 6. | Designación de tipo de neumático / <i>Type of tyre
designation</i> | : XPOWER EV+ |
| 6.1. | Marca(s) / <i>Brand name(s)/Trademark(s)</i> | : TOURADOR |

⁽¹⁾ Distinguiendo el número del país que ha otorgado/extendido/rechazado/retirado la homologación (ver disposiciones de homologación en el Reglamento) / *Distinguishing number of the country which has granted/extended/refused/withdrawn approval (see approval provisions in the Regulation).*

⁽²⁾ Táchese lo que no proceda / *Strike out what does not apply*

⁽³⁾ De acuerdo al Calendario 4 de la Revisión 3 del acuerdo de 1958. / *According to Schedule 4 to Revision 3 of the 1958 Agreement.*

⁽⁴⁾ De acuerdo a los párrafos 5.2.2. y 5.3.1.2 de este Reglamento / *According to paragraphs 5.2.2. and 5.3.1.2. of this Regulation.*

⁽⁵⁾ Apéndice 2 para neumáticos clase C1 y C2, Apéndice 3 para neumáticos clase C3. / *Appendix 2 for classes C1 and C2 tyres, Appendix 3 for class C3 tyres.*

⁽⁶⁾ En el caso de “neumático de nieve para uso en condiciones severas” se deberá añadir un informe de ensayo de acuerdo al Apéndice 2 del Anexo 7. / *In the case of “snow tyre for use in severe snow conditions” a test report according to Appendix 2 to Annex 7 shall be submitted*





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- 6.2. Denominación(es) comercial(es)/ Trade : XPOWER EV+
description(s)/commercial name(s) of the type of tyre
7. Servicio técnico autorizado a efectos de homologación o : IDIADA
comprobación de los ensayos de conformidad/
Technical service approved for purposes of approval or of
verification of conformity tests
8. Prestaciones homologadas: nivel de ruido en (fase 1/fase 2), nivel de adherencia en superficie mojada, nivel de resistencia a la rodadura (fase 1/fase 2) ⁽²⁾ /
Performances approved: sound level at (stage 1/stage 2), wet adhesion level, rolling resistance level (stage 1/stage 2) ⁽²⁾
- 8.1. Nivel de emisión de ruido de la medida representativa de neumático, de acuerdo al punto 7. del informe de ensayo en el Apéndice 1 del Anexo 3: 71 dB(A) a la velocidad de referencia de 70/80 km/h ⁽²⁾ / 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: 71 dB(A) at reference speed of 70/80 km/h ⁽²⁾
- 8.2. Nivel de adherencia en superficie mojada de la medida representativa de neumático, ver párrafo 2.7. de este Reglamento, de acuerdo al punto 7. del informe de ensayo del apéndice al Anexo 5: 1.62 (G) mediante el método de vehículo o de remolque ⁽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: 1.62 (G) using the vehicle or trailer ⁽²⁾ method
- 8.3. Nivel de resistencia a la rodadura de la medida representativa de neumático, ver párrafo 2.7. de este Reglamento, de acuerdo al punto 7. del informe de ensayo en el Apéndice 1 del Anexo 6: 8.077 N/kN / 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: 8.077 N/kN
- 8.4. Nivel de desempeño sobre nieve de la medida representativa de neumático, ver párrafo 2.7. del Reglamento Num. 117, de acuerdo al punto 7. del informe de ensayo en el apéndice 3 del Anexo 7: N/A (índice de adherencia en nieve) usando el método de frenado sobre nieve, método de tracción giratoria o método de aceleración ⁽²⁾ / Snow performance 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 3 to Annex 7: N/A (snow grip index) using the brake on snow method, spin traction method or acceleration method ⁽²⁾
- 8.4.1. Nivel de desempeño sobre hielo de la medida representativa de neumático, ver párrafo 2.7. del Reglamento Num. 117, de acuerdo al punto 7. del informe de ensayo en el apéndice 2 del Anexo 8: N/A (índice de adherencia en hielo) usando el método de frenado sobre nieve / Ice performance 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 2 to Annex 8: N/A (ice grip index) using the brake on ice method. ⁽²⁾

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⁽⁴⁾ De acuerdo a los párrafos 5.2.2. y 5.3.1.2 de este Reglamento / According to paragraphs 5.2.2. and 5.3.1.2. of this Regulation.

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⁽⁶⁾ En el caso de "neumático de nieve para uso en condiciones severas" se deberá añadir un informe de ensayo de acuerdo al Apéndice 2 del Anexo 7. / In the case of "snow tyre for use in severe snow conditions" a test report according to Appendix 2 to Annex 7 shall be submitted





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9. Número de informe emitido por el Servicio Técnico / : CN23120071
Number of report issued by the Technical Service
10. Fecha del informe emitido por este Servicio / : 23/01/2024
Date of report issued by that service
11. Motivo(s) de la extensión (en su caso) / : N/A
Reason(s) of extension (if applicable)
12. Observaciones / : Esta homologación ha sido concedida de
Any remarks conformidad con lo descrito en el punto 4 del
artículo 12 de la revisión 3 del acuerdo de 1958
(E/ECE/TRANS/505/Rev.3) y no cumple con una
versión en vigor / This approval has been granted
according to Revisión 3 of 1958
Agreement(E/ECE/TRANS/505/Rev.3), Article
12.4 and does not comply with a current version.
13. Lugar / : Madrid
Place
14. Fecha/ : Ver firma electrónica /
Date *See electronic signature*
15. Firma / Signature: EL SUBDIRECTOR GENERAL DE CALIDAD Y SEGURIDAD INDUSTRIAL
Resolución P.D. del DIRECTOR GENERAL DE INDUSTRIA Y DE LA PYME de 25-10-2012
Disposición adicional tercera del Real Decreto 1009/2023, de 5 de diciembre
16. Se adjunta a la presente notificación /Annexed to this communication are:
- 16.1 La lista de documentos que figuran en el expediente de homologación depositado en la Autoridad de
homologación de Tipo y que podrá obtenerse previa petición ⁽⁵⁾ / 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 ⁽⁵⁾
- 16.2 Una lista de designaciones de las medidas de neumático: se especifica para cada marca y/o cada descripción
comercial la lista de medidas de neumático, añadiendo para los neumáticos de clase C1 si son "Reinforced" o
"Extra Load" o no. / 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.

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⁽⁵⁾ Apéndice 2 para neumáticos clase C1 y C2, Apéndice 3 para neumáticos clase C3. / Appendix 2 for classes C1 and C2 tyres, Appendix 3 for class C3 tyres.

⁽⁶⁾ En el caso de "neumático de nieve para uso en condiciones severas" se deberá añadir un informe de ensayo de acuerdo al Apéndice 2 del Anexo 7. / In the case of "snow tyre for use in severe snow conditions" a test report according to Appendix 2 to Annex 7 shall be submitted





Anexo - Información adicional sobre esta Homologación de tipo

Condiciones de la autorización y pie de recurso

Los vehículos, sistemas, componentes o unidades técnicas independientes fabricados en virtud de esta homologación de tipo deben estar identificados y portar las marcas correspondientes según la reglamentación aplicable.

La producción en serie de vehículos, sistemas, componentes y unidades técnicas independientes debe realizarse de acuerdo con la documentación de homologación. Todo cambio en la producción individualizada requerirá autorización expresa previa por parte de la Autoridad de Homologación Española.

Cualquier modificación en los datos incluidos en el certificado de homologación, como el nombre de la empresa, representante en la UE, dirección y las plantas de fabricación deben ser comunicados inmediatamente a la Autoridad de Homologación Española.

La homologación perderá su validez cuando la misma haya sido retirada o el tipo ya no cumpla con los requisitos legales. La retirada tendrá lugar siempre que hayan dejado de cumplirse los requisitos necesarios para la concesión y mantenimiento de la misma, cuando el fabricante no pueda demostrar a la Autoridad de Homologación el cumplimiento con los requisitos y procedimientos para garantizar la conformidad de la producción, en caso de que el titular no cumpla con sus obligaciones inherentes a la homologación o cuando se determine que el tipo homologado no cumple con los requisitos de seguridad y medio ambiente.

La Autoridad de Homologación de Tipo española podrá verificar el cumplimiento de las obligaciones del fabricante en cualquier momento. En particular, se podrá comprobar la correspondencia del producto con el tipo homologado, así como las medidas establecidas para garantizar la conformidad de la producción. A tal efecto se podrán tomar o solicitar las muestras necesarias. Se permitirá el acceso sin trabas a las instalaciones de producción y almacenamiento a los empleados o representantes de la Autoridad de Homologación Española.

La autorización objeto de esta resolución de homologación de tipo no es transferible. Los derechos de marca de terceros no se encuentran afectados por esta homologación.

Contra la presente Resolución, que no pone fin a la vía administrativa, podrá interponerse recurso de alzada ¹ ante la Dirección General de Estrategia Industrial y de la Pequeña y Mediana empresa, o ante la Secretaría de Estado de Industria, en el plazo de un mes a partir del día siguiente a su notificación, de conformidad con los artículos 121 y 122 de la Ley 39/2015, de 1 de octubre, del Procedimiento Administrativo Común de las Administraciones Públicas.

¹ Nota: Para interponer recurso de alzada deberá acceder al siguiente enlace:
<https://sede.serviciosmin.gob.es/es-es/procedimientoselectronicos/Paginas/detalle-procedimientos.aspx?IdProcedimiento=157>





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Annex - Additional Information on this Type Approval

Collateral clauses and right to appeal (Courtesy translation)

All vehicles, systems, components or separate technical units which correspond to the approved type are to be identified and marked according to the applied regulation.

The serial fabrication of vehicles, systems, components or separate technical must be in exact accordance with the approval documents. Changes in the individual production are only allowed with express consent of the Spanish Type Approval Authority.

Changes in the data included in the approval certificate, such as the name of the company, EU representative, address and the manufacturing plant are to be immediately disclosed to the Spanish Type Approval Authority.

The approval expires if it is withdrawn or if the type approved no longer complies with the legal requirements. The revocation can be made if the demanded requirements for issuance and the continuance of the approval no longer exist, if the manufacturer cannot demonstrate to the Type Approval Authority that it comply with the requirements and procedures to guarantee the conformity of production, if the holder of the approval violates the duties involved in the approval or if it is determined that the approved type does not comply with the requirements of traffic safety or environmental protection.

The Spanish Type Approval Authority may check the proper exercise of the conferred authority taken from this approval at any time. In particular, this means the compliant production as well as the measures for conformity of production. For this purpose, samples can be taken or have taken. The employees or the representatives of the Spanish Type Approval Authority may get unhindered access to the production and storage facilities.

The authorization contained with issuance of this approval is not transferable. Trade mark rights of third parties are not affected with this approval.

This approval does not conclude the administrative channel and can be appealed ² within one month after notification, according to articles 121 and 122 of Ley 39/2015, de 1 de octubre, del Procedimiento Administrativo Común de las Administraciones Públicas. The appeal is to be addressed to Dirección General de Estrategia Industrial y de la Pequeña y Mediana empresa, or Secretaría de Estado de Industria.

² Note: Appeal on the following link:

<https://sede.serviciosmin.gob.es/es-es/procedimientoselectronicos/Paginas/detalle-procedimientos.aspx?IdProcedimiento=157>





INFORME/REPORT N° CN23120071

REGLAMENTO CEPE/ONU 117R02/14 REFERENTE A EMISIÓN DE RUIDO A LA RODADURA, ADHERENCIA EN MOJADO Y RESISTENCIA A LA RODADURA UN/ECE REGULATION 117R02/14 RELATED TO ROLLING SOUND EMISSIONS, ADHESION ON WET SURFACES AND ROLLING RESISTANCE

Solicitante / Applicant	: SHANDONG YONGSHENG RUBBER GROUP CO., LTD. South of Guangkai Road, Economic Development Zone, Guangrao County 257335, Dongying (CHINA)
Fabricante / Manufacturer	: SHANDONG YONGSHENG RUBBER GROUP CO., LTD. South of Guangkai Road, Economic Development Zone, Guangrao County 257335, Dongying (CHINA)
Clase del neumático / Tyre Class	: C1
Categoría de uso / Category of use	: Normal / Normal
Neumático de tracción / Traction tyre	: N/A / N/A
Designación de tipo de neumático / Tyre type designation	: XPOWER EV+
Marca / Brand name	: TOURADOR
Nombre comercial / Commercial name	: XPOWER EV+
Lugar y fecha de emisión del informe / Place and date of issue	: L'Albornar, Santa Oliva (Tarragona), 23/01/2024

CONCLUSIONES: La muestra ensayada de la familia CUMPLE con las prescripciones referentes a “emisión de ruido a la rodadura” y/o “adherencia en superficie mojada” y/o “resistencia a la rodadura” y/o “prestaciones en nieve” según el REGLAMENTO CEPE/ONU 117R02/14. De acuerdo con el punto 12.12 de las Disposiciones Transitorias, el procedimiento de prueba para medir el agarre en mojado no tiene en cuenta las disposiciones del Suplemento 13. Las características de las muestras ensayadas están detalladas en los anexos de este informe.

CONCLUSIONS: The tested samples of the family FULFIL the technical prescriptions with regard to “rolling sound emissions level” and/or “adhesion on wet surfaces” and/or “rolling resistance” and/or “snow performance” pursuant to UN/ECE REGULATION 117R02/14. According to point 12.12 of the Transitional Provisions, the test procedure for measuring wet grip does not take into account the provisions of Supplement 13. The characteristics of the tested samples are detailed in the annexes to the test report.

Realizado por / Performed by:

V.B°. / Revised by:



Zhu Yuan
INGENIERO DE HOMOLOGACIONES
HOMOLOGATION ENGINEER



Josep Masip Gomez
JEFE DE DEPARTAMENTO
DEPARTMENT MANAGER

- * LOS RESULTADOS PRESENTADOS SE REFIEREN ÚNICAMENTE A LA MUESTRA ENSAYADA. / THE RESULTS PRESENTED REFER TO THE TESTED SAMPLE ONLY.
- * QUEDA TERMINANTEMENTE PROHIBIDA LA REPRODUCCION PARCIAL DE ESTE INFORME SIN PERMISO EXPRESO DE IDIADA. / THE PARTIAL REPRODUCTION OF THIS REPORT WITHOUT THE PERMISSION OF IDIADA IS COMPLETELY FORBIDDEN.
- * EL LABORATORIO HA CALCULADO LA INCERTIDUMBRE DE MEDIDA ASOCIADA A LOS RESULTADOS. / MEASUREMENT UNCERTAINTY OF THE RESULTS HAS BEEN CALCULATED BY THE LABORATORY.



INFORME/REPORT N° CN23120071

RESUMEN/ SUMMARY

1. Dimensiones incluidas en el tipo del neumático /
Dimensions included in the type of tyre : Ver anexo Documentación técnica
: *See annex Technical documentation*
2. Medidas de neumático seleccionadas para ensayo / *Tyre sizes selected for testing*
 - 2.1. Emisión de ruido a la rodadura / *Rolling sound emissions* : 255/40ZR20 101W XL (mayor ancho de sección / *widest section width*).
Ver Anexo 1, Informe CN23110341, IDIADA, 13/11/2023
See Annex 1, Test report CN23110341, IDIADA, 13/11/2023
 - 2.2. Adherencia en superficie mojada / *Adhesion on wet surfaces*: 255/40ZR20 101W XL (cumple extra 10% / *meets extra 10%*).
Ver Anexo 2, Informe CN23110342, IDIADA, 22/11/2023
See Annex 2, Test report CN23110342, IDIADA, 22/11/2023
 - 2.3. Resistencia a la rodadura / *Rolling resistance* : 235/45ZR18 98W XL (menor índice de carga / *lowest load index*).
Ver Anexo 3, Informe CN23110290, IDIADA, 07/11/2023
See Annex 3, Test report CN23110290, IDIADA, 07/11/2023
 - 2.4. Adherencia en nieve / *Snow performance* : N/A
3. Razones para la extensión (si aplica) / *Reason(s) of extension (if applicable)*
- N/A
4. Lista de Anexos a este informe / *List of Annexes to this report*:
 - 4.1. Anexo 1/ *Annex 1*: Informe referente a emisión de ruido a la rodadura / *Test report according to rolling sound emission level*.
 - 4.2. Anexo 2/ *Annex 2*: Informe referente a adherencia en superficie mojada / *Test report according to adhesion on wet surfaces*.
 - 4.3. Anexo 3 /*Annex 3*: Informe referente a resistencia a la rodadura / *Test report according to rolling resistance*.
 - 4.4. Anexo /*Annex*: Documentación técnica del fabricante / *Manufacturer's technical documentation*.

Lugar y fecha de emisión del informe /
Place and date of issue

L'Albornar, Santa Oliva (Tarragona), 23/01/2024



Zhu Yuan
INGENIERO DE HOMOLOGACIONES
HOMOLOGATION ENGINEER

* LOS RESULTADOS PRESENTADOS SE REFIEREN ÚNICAMENTE A LA MUESTRA ENSAYADA. / *THE RESULTS PRESENTED REFER TO THE TESTED SAMPLE ONLY.*
 * QUEDA TERMINANTEMENTE PROHIBIDA LA REPRODUCCIÓN PARCIAL DE ESTE INFORME SIN PERMISO EXPRESO DE IDIADA. / *THE PARTIAL REPRODUCTION OF THIS REPORT WITHOUT THE PERMISSION OF IDIADA IS COMPLETELY FORBIDDEN.*
 * EL LABORATORIO HA CALCULADO LA INCERTIDUMBRE DE MEDIDA ASOCIADA A LOS RESULTADOS. / *MEASUREMENT UNCERTAINTY OF THE RESULTS HAS BEEN CALCULATED BY THE LABORATORY.*
 * LA REGLA DE DECISIÓN UTILIZADA, SEGÚN AL NORMA ILAC-G8, HA SIDO LA DECLARACIÓN BINARIA DE ACEPTACIÓN SIMPLE. / *THE DECISION RULE TAKEN, ACCORDINGLY TO THE ILAC-G8, HAS BEEN THE BINARY DECLARATION OF SIMPLE ACCEPTANCE.*



ANNEX 1



REPORT No. CN23110341

UN REGULATION No. 117R02/14 RELATED TO ROLLING SOUND EMISSIONS

Applicant	: HANGZHOU SHACE AUTOMOTIVE TECHNOLOGY SERVICE CO., LTD Room 303, Unit B Building 1, Zhejiang National University Science Park, No.9 Jiuahuan Road, Jianggan District, Hangzhou City, Zhejiang Province, P.R. China
Manufacturer	: SHANDONG YONGSHENG RUBBER GROUP CO., LTD. South of Guangkai Road, Economic Development Zone, Guangrao County 257335, Dongying (CHINA)
Tyre class	: C1
Category of use	: Normal
Tyre for use in severe snow conditions	: No
Traction tyre	: N/A
Brand name / Trade mark	: Tourador
Trade description/ Commercial name	: X POWER EV+
Tyre size	: 255/40ZR20 101W XL
Sound level according to paragraph 4.4. of Annex 3 [dB(A)]	: 71
Place and date of issue	: L'Albornar, Santa Oliva (Tarragona), 13/11/2023

CONCLUSIONS: The samples of the family have been tested according to the technical prescriptions with regard to "rolling sound emissions level" pursuant to UN Regulation No. 117R02/14.
The characteristics of the tested samples are detailed in the annex to the test report.

Performed by:



Chen(Jacky) Zhu
HOMOLOGATION ENGINEER

Revised by:



Josep Masip Gomez
DEPARTMENT MANAGER



ANNEX TO THE TEST REPORT

ROLLING SOUND EMISSIONS, REPORT No. CN23110341

1. TEST DATA

1.1. Test tyre details

1.1.1	Applicant ⁽¹⁾	: HANGZHOU SHACE AUTOMOTIVE TECHNOLOGY SERVICE CO., LTD Room 303, Unit B Building 1, Zhejiang National University Science Park, No.9 Jiuhuan Road, Jianggan District, Hangzhou City, Zhejiang Province, P.R. China
1.1.2	Manufacturer ⁽¹⁾	: SHANDONG YONGSHENG RUBBER GROUP CO., LTD. South of Guangkai Road, Economic Development Zone, Guangrao County 257335, Dongying (CHINA)
1.1.3	Tyre class	: C1
1.1.4	Category of use	: Normal
1.1.5	Tyre for use in severe snow conditions	: No
1.1.6	Traction tyre	: N/A
1.1.7	Brand name / Trade mark	: Tourador
1.1.8	Trade description / Commercial name	: X POWER EV+
1.1.9	Tyre size	: 255/40ZR20 101W XL
1.1.10	Load index / Corresponding mass Q _r [kg]	: 101 / 825
1.1.11	Tyre structure	: Radial
1.1.12	Date code, other manufacturer markings	: 2823, 1JEV3R920
1.1.13	Reference inflation pressure P _r [kPa]	: 290

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



1.1.14 Test inflation pressure P_t [kPa] :

	P_t [kPa] admissible values
Front axle left wheel	$201.28 \leq 210.00 \leq 221.41$
Front axle right wheel	$204.56 \leq 210.00 \leq 225.01$
Rear axle left wheel	$194.77 \leq 200.00 \leq 214.25$
Rear axle right wheel	$204.56 \leq 210.00 \leq 225.01$

$P_t \geq 150$ kPa

FULFILS / ~~NOT FULFILS~~

1.1.15 Test tyre internal reference :

Front left	Front right
CN-2311/00353-01	CN-2311/00353-02

Rear left	Rear right
CN-2311/00353-03	CN-2311/00353-04

1.1.16 Test rim : 9.0J x 20

1.1.17 Test rim internal reference :

Front left	Front right
CN-1912/02733-01	CN-1912/02733-02

Rear left	Rear right
CN-1912/02733-03	CN-1912/02733-04

1.1.18 Test tyre load [kg] :

	Load	Q_t [N] / % $\frac{Q_t}{Q_r}$
Front axle left wheel	616	$50 < 74.67 < 90$
Front axle right wheel	624	$50 < 75.64 < 90$
Rear axle left wheel	600	$50 < 72.73 < 90$
Rear axle right wheel	624	$50 < 75.64 < 90$

FULFILS / ~~NOT FULFILS~~

$Q_{t,avr}$ [N] / % $\frac{Q_{t,avr}}{Q_r}$
$70 \leq 74.67 \leq 80$

FULFILS / ~~NOT FULFILS~~



1.2. Test vehicle

1.2.1	Trade name	: VOLKSWAGEN
1.2.2	Model	: TOUAREG
1.2.3	Year	: 2017
1.2.4	Transmission	: Automatic
1.2.5	Wheelbase [mm]	: 2,904

For Class C1 less than 3,500 mm.

FULFILS / NOT FULFILS

1.2.6	Vehicle internal reference	: CN-2105/00678
-------	----------------------------	-----------------

1.3. Test equipment

1.3.1	Sound level meter 1	: 193663
1.3.2	Sound level meter 2	: 193664
1.3.3	Manometer	: 193661
1.3.4	Weight scale	: 184618
1.3.5	Track temperature measurement device	: 182330
1.3.6	Wind speed measurement device	: 193666
1.3.7	Speed measurement device	: 035816
1.3.8	Ambient temperature measurement device	: 193659



2. TEST TRACK

2.1. Environment

2.1.1 Air temperature T_a [°C] : 8.7

$5.0 < T_a < 40.0$

FULFILS / ~~NOT FULFILS~~

2.1.2. Test surface temperature T_s [°C] : 13.2

$5.0 \leq T_s \leq 50.0$

FULFILS / ~~NOT FULFILS~~

2.1.3 Wind speed [m/s] : 4.2

Less than 5 m/s

FULFILS / ~~NOT FULFILS~~

2.1.4 Ambient noise [dB(A)] : 45.9

Test result – Ambient noise ≥ 10 dB(A)

FULFILS / ~~NOT FULFILS~~

2.1.5 Wind direction [°] : 113.0

2.2. Method of certification: compliance with ISO 10844:2014:

- Report number : FM / 002 / 21
- Date of check : March 6th 2023
- Issued by : IDIADA



3. TEST RESULTS

Reference Speed: v_{ref} [km/h] : 80
Range Speed [km/h] : 70.0 - 90.0

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	72.0	N → S	71.7	71.9	8.8	13.4	71.3	71.5
2	74.3	N → S	71.7	72.3	8.8	13.6	71.3	71.9
3	75.9	N → S	72.5	72.7	8.7	13.3	72.1	72.3
4	77.8	N → S	72.6	73.3	8.8	13.2	72.2	72.9
5	81.9	N → S	73.1	73.5	8.7	13.3	72.7	73.1
6	84.2	N → S	73.8	74.0	8.6	13.0	73.4	73.6
7	85.8	N → S	74.1	74.1	8.6	12.8	73.7	73.7
8	88.6	N → S	74.7	74.7	8.6	13.0	74.3	74.3

- 3.1. Regression line slope : 31.51
- 3.2. Sound level after temperature correction according to paragraph 4.3 of Annex 3 [dB(A)] : 72.8
- 3.3. Sound level according to paragraph 4.4. of Annex 3 [dB(A)] : 71
- 3.4. Limit value [dB(A)] :

C1	
Stage 2	
Nominal Section width	Limit dB (A)
185 and lower	70
Over 185 up to 245	71
Over 245 up to 275	72
Over 275	74

The above limits shall be increased by 1 dB(A) for "snow tyre for use in severe snow conditions", extra load tyres or reinforced tyres, or any combination of these classifications.



4. TEST TYRE PICTURES



Picture 1. Sidewall



Picture 2. Tread pattern

Place of test: ICPG, Zhaoyuan, China

Date of test: 09/11/2023

朱晨

Chen(Jacky) Zhu
HOMOLOGATION ENGINEER



ANNEX 2

Validate this report with the security code «BZD8E9C4» at: <https://extranet.idiada.com/hom-cve>
Verifique el informe con código de seguridad «BZD8E9C4» en: <https://extranet.idiada.com/hom-cve>

REPORT N° CN23110342

UN REGULATION No. 117R02/14 RELATED TO ADHESION ON WET SURFACES

Applicant	: HANGZHOU SHACE AUTOMOTIVE TECHNOLOGY SERVICE CO., LTD Room 303, Unit B Building 1, Zhejiang National University Science Park, No.9 Jiuahuan Road, Jianggan District, Hangzhou City, Zhejiang Province, P.R. China
Manufacturer	: SHANDONG YONGSHENG RUBBER GROUP CO., LTD. South of Guangkai Road, Economic Development Zone, Guangrao County 257335, Dongying (CHINA)
Tyre class	: C1
Category of use	: Normal
Tyre for use in severe snow conditions	: No
Traction tyre	: N/A
Brand name / Trade mark	: Tourador
Trade description/ Commercial name	: X POWER EV+
Tyre size	: 255/40ZR20 101W XL
Wet grip index relative to SRTT according to paragraph 4.1.6.4.	: 1.62
Place and date of issue	: L'Albornar, Santa Oliva (Tarragona), 22/11/2023

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. 117R02/14. The characteristics of the tested samples are detailed in the annex to the test report.

Performed by:



Chen(Jacky) Zhu
HOMOLOGATION ENGINEER

Revised by:



Josep Masip Gomez
DEPARTMENT MANAGER





ANNEX TO THE TEST REPORT

ADHESION ON WET SURFACES, REPORT N° CN23110342

1. TEST DATA

1.1. Test tyre details

1.1.1	Applicant ⁽¹⁾	: HANGZHOU SHACE AUTOMOTIVE TECHNOLOGY SERVICE CO., LTD Room 303, Unit B Building 1, Zhejiang National University Science Park, No.9 Jiuahuan Road, Jianggan District, Hangzhou City, Zhejiang Province, P.R. China
1.1.2	Manufacturer ⁽¹⁾	: SHANDONG YONGSHENG RUBBER GROUP CO., LTD. South of Guangkai Road, Economic Development Zone, Guangrao County 257335, Dongying (CHINA)
1.1.3	Tyre class	: C1
1.1.4	Category of use	: Normal
1.1.5	Tyre for use in severe snow conditions	: No
1.1.6	Traction tyre	: N/A
1.1.7	Brand name / Trade mark	: Tourador
1.1.8	Trade description / Commercial name	: X POWER EV+
1.1.9	Tyre size	: 255/40ZR20 101W XL
1.1.10	Load index / Corresponding mass Q _r [kg]	: 101 / 825
1.1.11	Tyre structure	: Radial
1.1.12	Date code, other manufacturer markings	: 2823, 1JEV3R920
1.1.13	Reference inflation pressure P _r [kPa]	: 290

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

* 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.
 * THE DECISION RULE TAKEN, ACCORDINGLY TO THE ILAC-G8, HAS BEEN THE BINARY DECLARATION OF SIMPLE ACCEPTANCE.



1.1.14 Test tyre internal reference :

Front left	Front right
CN-2311/00353-01	CN-2311/00353-02
Rear left	Rear right
CN-2311/00353-03	CN-2311/00353-04

1.1.15 Test rim : 9.0J x 20

1.1.16 Test rim internal reference :

Front left	Front right
CN-1912/02733-01	CN-1912/02733-02
Rear left	Rear right
CN-1912/02733-03	CN-1912/02733-04

1.1.17 Test SRTT identification : UNIROYAL 225/60R16 - ASTM F 2493

1.1.18 Test SRTT internal reference :

Front left	Front right
CN-2204/01869-01	CN-2204/01869-02
Rear left	Rear right
CN-2204/01869-03	CN-2204/01869-04

1.1.19 Test SRTT rim : 6.5J x 16

1.1.20 Test SRTT rim internal reference :

Front left	Front right
CN-1912/02725-01	CN-1912/02725-02
Rear left	Rear right
CN-1912/02725-03	CN-1912/02725-04

1.1.21 Test tyre load [kg] :

SRTT 1		Candidate tyre			SRTT 2	
FL	526	FL	532	64.5%	FL	524
FR	512	FR	522	63.3%	FR	510
RL	512	RL	528	64.0%	RL	514
RR	520	RR	528	64.0%	RR	520

Between 60 per cent and 90 per cent of the load value corresponding to the load index of the tyre.

FULFILS / NOT FULFILS

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1.1.22 Tyre inflation pressure [kPa] :

SRTT 1		Candidate tyre		SRTT 2	
FL	227	FL	230	FL	225
FR	227	FR	230	FR	225
RL	220	RL	220	RL	220
RR	220	RR	220	RR	220

Pressure for front axle: $IP = P_r(1.3 \cdot Q/Q_r)^{1.25}$

Pressure for rear axle: 220

1.2. Test vehicle

- 1.2.1 Trade name : VOLKSWAGEN
- 1.2.2 Model : TAYRON
- 1.2.3 Year : 2020
- 1.2.4 Transmission : Automatic
- 1.2.5 Wheelbase [mm] : 2,731
- 1.2.6 Vehicle internal reference : ICPG-TAYRON

1.3. Test equipment

- 1.3.1 Manometer : 193661
- 1.3.2 Weight scale : 184618
- 1.3.3 Thermometer : 182330
- 1.3.4 Track temperature measurement device : 182329
- 1.3.5 Speed measurement device : 035816
- 1.3.6 Force pedal : 193669

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2. TEST TRACK

2.1. Location : Straight line braking, ICPG

2.2. Date of check on compliance of the test surface : Feb 27, 2023

2.3. Test track characteristics:

2.3.1 Texture depth [mm] : 0.70

2.3.2 BFC : 0.72

2.3.3 Water depth [mm] : Average of 1.09

2.4. Test method : Vehicle

2.5. Air temperature T_a [°C] : 21.3

2.6. Wet surface temperature T_w [°C] :

$$12.0 \leq T_w \leq 35.0$$

SRTT 1	Candidate tyre	SRTT 2
13.0	15.7	14.8

FULFILS / ~~NOT FULFILS~~

Variation during the test less than 10 °C

FULFILS / ~~NOT FULFILS~~



3. TEST RESULTS

Test run	SRTT 1		Candidate tyre		SRTT 2	
	Braking distance [m]	BFC	Braking distance [m]	BFC	Braking distance [m]	BFC
1	35.97	0.66	27.53	0.86	35.49	0.66
2	35.43	0.67	28.74	0.82	36.87	0.64
3	35.69	0.66	27.95	0.84	35.23	0.67
4	35.77	0.66	28.27	0.83	35.31	0.67
5	-	-	28.39	0.83	-	-
6	-	-	28.83	0.82	-	-

Validation of results

	SRTT 1	Candidate tyre	SRTT 2
CV _{BFC} (≤ 4%)	0.63	1.74	2.12
CVal(BFC _{ave}) (≤ 5%)	0.00		
BFC _{ave,corr} [0.57, 0.79]	0.65	-	0.65

FULFILS / NOT FULFILS

Brake Test No	Test Speed [km/h]	Direction of run	SRTT	Candidate tyre	BFC(R _a)	BFC(T)
1	80 - 20	S - N	P225/60R16	---	---	---
2	80 - 20	S - N	---	255/40ZR20	0.66	0.83
4	80 - 20	S - N	P225/60R16	---	---	---

Calculation of the wet grip index of the candidate tyre:

$$G(T_n) = K_{\text{vehicle}} \cdot \{ \overline{\text{BFC}_{\text{ave}}(T_n)} - [a \cdot \Delta \text{BFC}(R) + b \cdot \Delta \theta + c \cdot (\Delta \theta)^2 + d \cdot \Delta \text{MTD}] \}$$

where:

$$a = 0.99382$$

$$b = 0.00269$$

$$c = -0.00028$$

$$d = -0.02472$$

$$\theta_0 = 20$$

$$\text{BFC}(R_0) = 0.68$$

Wet grip index of the candidate tyre

$$G(T) = 1.62$$

3.1. Limit value

:

C1		
Category of use	Wet grip index (G)	+10% Wet Grip index (G)
Normal	≥ 1.1	≥ 1.21
Snow		
Snow in severe conditions and speed symbol R and above (including H)	≥ 1.0	≥ 1.1
Snow in severe conditions and speed symbol Q or below (excluding H)	≥ 0.9	≥ 0.99
Special	-	-

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* THE DECISION RULE TAKEN, ACCORDINGLY TO THE ILAC-G8, HAS BEEN THE BINARY DECLARATION OF SIMPLE ACCEPTANCE.



4. TEST TYRE PICTURES



Picture 1. Sidewall



Picture 2. Tread pattern

Place of test: ICPG, Zhaoyuan, China

Date of test: 21/11/2023

朱晨

Chen(Jacky) Zhu
HOMOLOGATION ENGINEER

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* MEASUREMENT UNCERTAINTY OF THE RESULTS HAS BEEN CALCULATED BY THE LABORATORY.
* THE DECISION RULE TAKEN, ACCORDINGLY TO THE ILAC-G8, HAS BEEN THE BINARY DECLARATION OF SIMPLE ACCEPTANCE.



ANNEX 3

Validate this report with the security code «BZD8E9C4» at: <https://extranet.idiada.com/hom-cve>
Verifique el informe con código de seguridad «BZD8E9C4» en: <https://extranet.idiada.com/hom-cve>



REPORT Nº CN23110290

UN REGULATION 117R02/15 RELATED TO ROLLING RESISTANCE

Applicant	: SHANDONG YONGSHENG RUBBER GROUP CO., LTD. South of Guangkai Road, Economic Development Zone, Guangrao County 257335, Dongying (CHINA)
Manufacturer	: SHANDONG YONGSHENG RUBBER GROUP CO., LTD. South of Guangkai Road, Economic Development Zone, Guangrao County 257335, Dongying (CHINA)
Tyre class	: C1
Category of use	: Normal
Tyre for use in severe snow conditions	: N/A
Traction tyre	: N/A
Brand name / Trade mark	: Tourador
Trade description/ Commercial name	: X POWER EV+
Tyre size	: 235/45ZR18 98W XL
Rolling resistance coefficient (temperature and drum diameter corrected)	: 8.077
Place and date of issue	: L'Albornar, Santa Oliva (Tarragona), 07/11/2023

CONCLUSIONS: The sample of the family has been tested according to the technical prescriptions with regard to "rolling resistance" pursuant to UN REGULATION 117R02/15 Annex 6.
The characteristics of the tested sample are detailed in the annex to the test report.

Performed by:



Zhu Yuan
HOMOLOGATION ENGINEER

Revised by:



Josep Masip Gomez
DEPARTMENT MANAGER



ANNEX TO THE TEST REPORT

ROLLING RESISTANCE, REPORT N° CN23110290

1. TEST DATA

1.1. Test tyre details

1.1.1	Applicant ⁽¹⁾	: SHANDONG YONGSHENG RUBBER GROUP CO., LTD. South of Guangkai Road, Economic Development Zone, Guangrao County 257335, Dongying (CHINA)
1.1.2	Manufacturer ⁽¹⁾	: SHANDONG YONGSHENG RUBBER GROUP CO., LTD. South of Guangkai Road, Economic Development Zone, Guangrao County 257335, Dongying (CHINA)
1.1.3	Tyre class	: C1
1.1.4	Category of use	: Normal
1.1.5	Tyre for use in severe snow conditions	: N/A
1.1.6	Traction tyre	: N/A
1.1.7	Brand name / Trade mark	: Tourador
1.1.8	Trade description / Commercial name	: X POWER EV+
1.1.9	Tyre size	: 235/45ZR18 98W XL
1.1.10	Load index / Corresponding mass Q _r [kg]	: 98 / 750
1.1.11	Tyre structure	: Radial
1.1.12	Date code, other manufacturer markings	: 2823
1.1.13	Inflation pressure [kPa]	: 250
1.1.14	Test tyre internal reference	: CN23110290
1.1.15	Test rim	: 8.0 × 18
1.1.16	Test rim internal reference	: 8.0 × 18
1.1.17	Test rim material	: Steel

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



1.2. Test machine data

1.2.1 Identification : JD-029

1.2.2 Drum diameter [mm] : 2.0

FULFILS/NOT FULFILS

1.2.3 Surface : Smooth steel

1.2.4 Roughness [μm] : ≤ 6.3

FULFILS/NOT FULFILS

1.3. Test data

1.3.1 Measurement method : Force

1.3.2 Test speed [km/h] : 80

C1: 80 km/h (all speed and load symbols);

C2/C3: 80 km/h (all speed symbol and load symbol $\leq$ 121);

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

C3: 80 km/h (K:110 km/h and higher and load symbol $>$ 121);

FULFILS/NOT FULFILS

1.3.3 Load Index (LI) / Load [kg] : 98 / 750

1.3.4 Test load [kg / N] : 600 / 5,884

C1 (% of maximum load capacity): 80

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] : 250

C1: 210 kPa if standard/ 250 kPa if reinforced

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 during test (r_L)[m] : 0.314

*. 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

* THE DECISION RULE USED, ACCORDING TO THE ILAC-G8 STANDARD, WAS THE BINARY STATEMENT FOR SIMPLE ACCEPTANCE



1.3.7 Distance from the tyre axis to the drum outer surface under steady state conditions during skim test (r_L) [m] : 0.335

1.3.7 Ambient temperature T_{am} [°C] : 24.96
 $20.0 \leq T_{am} \leq 30.0$

FULFILS/NOT FULFILS

1.3.8 Skim test load [N] : 100.018

$C1 \leq 200$ N

$C2 \leq 200$ N if measured in C1 machine or $C2 \leq 500$ N if measured in C3 machine

$C3 \leq 500$ N

FULFILS/NOT FULFILS

1.3.10 Spindle force (Ft) [N] : 42.056

1.3.11 Spindle force during skim test (Ft) [N] : 5.759

1.3.12 Parasitic loss (Fpl) [N] : 7.689

1.3.13 Rolling resistance (Fr) [N] : 47.559

2. TEST RESULTS

2.1. Rolling resistance coefficient

2.1.1 Initial value (or average in the case of more than 1) [N/kN] : 8.080

2.1.2 Temperature corrected value [N/kN] : 8.077

2.1.3 Temperature and drum diameter corrected value [N/kN] : 8.077

Rolling resistance coefficient C_r [N/kN] = 8.077

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.

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

* THE DECISION RULE USED, ACCORDING TO THE ILAC-G8 STANDARD, WAS THE BINARY STATEMENT FOR SIMPLE ACCEPTANCE



3. TEST TYRE PICTURES



Picture 1. Sidewall



Picture 2. Tread pattern

Place of test: Qingdao Product Quality Testing Research Institute (Qingdao, China)

Date of test: 07/11/2023

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Zhu Yuan
HOMOLOGATION ENGINEER

- * THE PRESENTED RESULTS REFER ONLY TO THE TESTED SAMPLE.
- * THE PARTIAL REPRODUCTION OF THIS REPORT WITHOUT THE PERMISSION OF IDIADA IS COMPLETELY FORBIDDEN.
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- * THE DECISION RULE USED, ACCORDING TO THE ILAC-G8 STANDARD, WAS THE BINARY STATEMENT FOR SIMPLE ACCEPTANCE

DOCUMENTACIÓN TÉCNICA /
TECHNICAL DOCUMENTATION

Type of tyre:
XPOWER EV+

Date : Dec 25. 2023
Ext. : 00

**REGARDING ROLLING SOUND EMISSIONS LEVEL AND/OR TO ADHESION
PERFORMANCE LEVEL ON WET SURFACES AND/OR ROLLING RESISTANCE
ACCORDING TO REGULATION 117.02**

1. GENERAL
 - 1.1. The performance characteristics to be assessed for the tyre type: : Rolling sound emissions level / adhesion performance level on wet surfaces / rolling resistance level / ~~snow performance level~~
 - 1.2. Manufacturer's name and address : SHANDONG YONGSHENG RUBBER GROUP CO., LTD.
South of Guangkai Road, Economic Development Zone, Guangrao County 257335, Dongying (CHINA)
 - 1.3. If applicable, name and address of manufacturer's representative : N.A.
 - 1.4. Brand name(s)/Trademark(s) : TOURADOR
 - 1.5. Trade description(s)/Commercial name(s) : XPOWER EV+
 - 1.6. Type of tyre : XPOWER EV+
2. TYRE
 - 2.1. Tyre class : C1/~~C2/C3~~ ⁽¹⁾
 - 2.2. Category of use : Normal/~~snow/special~~ ⁽¹⁾
 - 2.2.1. Whether tyre for use in severe snow conditions : ~~Yes~~/No ⁽¹⁾
 - 2.2.2. For Class C2, C3 tyre, whether traction tyre : ~~Yes/No~~/N.A. ⁽¹⁾
 - 2.3. Tyre structure : ~~Diagonal/bias-belted~~/radial ⁽¹⁾
 - 2.4. A list of tyre size designations covered by this application and specifying for each brand name/trademark and/or each trade description /commercial name the applicable tyre size designations and service descriptions, adding in case of Class C1 tyres whether "reinforced" (or "extra load") or not. : Refer to attachment 1
3. The application for approval shall be accompanied (in triplicate) by
 - 3.1. Details of the major features, with respect to the effects on the performance (i.e. rolling sound emission level, adhesion on wet surfaces, rolling resistance and snow grip) of the tyres, including the tread pattern, included in the designated range of tyre sizes. : Refer to Attachment 2
 - 3.2. Drawings or photographs of the tyre sidewall, showing the information given in paragraph 3.1.8. above and the approval marking referred to in paragraph 4. : Refer to Attachment 3
 - 3.3. In the case of applications relating to special use tyres, a copy of the mould drawing of the tread pattern shall be supplied in order to allow verification of the void-to-fill ratio. : N.A.

⁽¹⁾ Strike out what does not apply.
R117-V.00(2021-09-30)

Attachment 1-List of Tyre Size

Brand name(s)/Trademark(s):

TOURADOR

Trade description(s)/Commercial name(s):

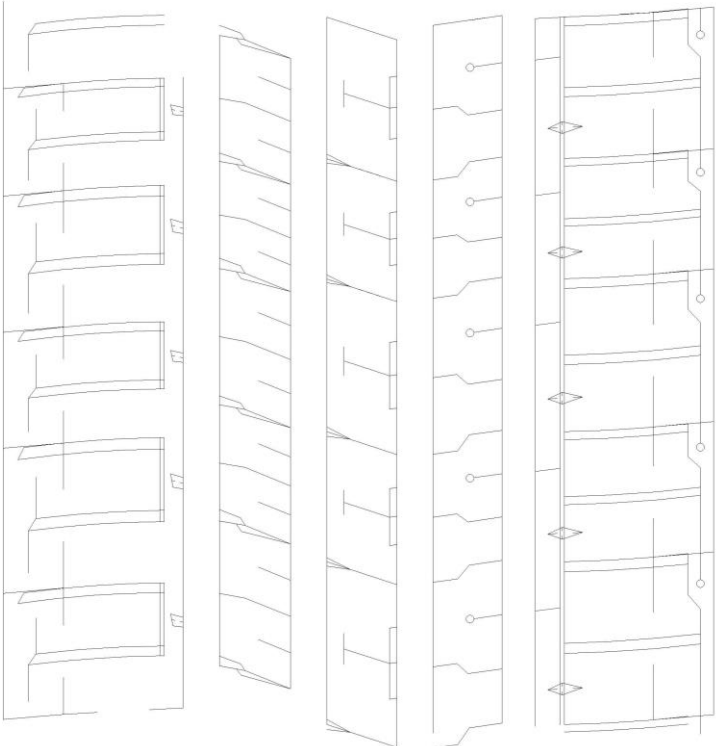
XPOWER EV+

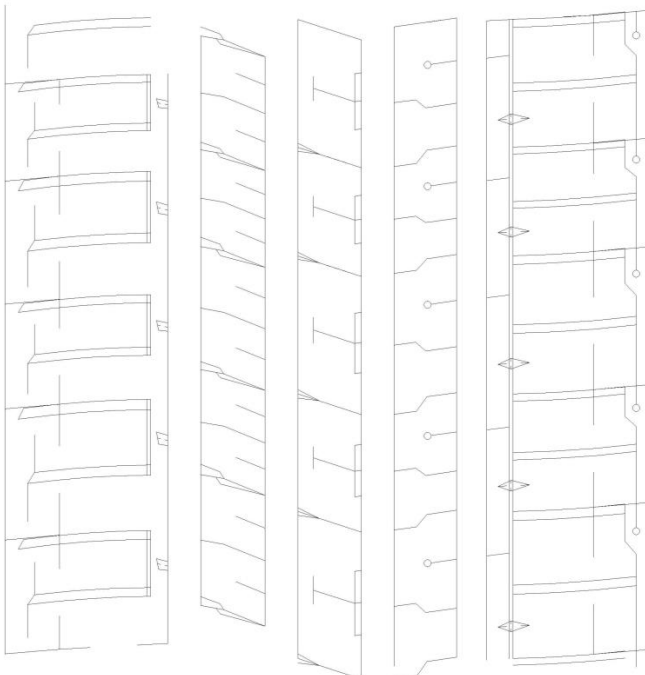
	Type Approval Number	Tyre size designations / Load index / Speed symbol	Standard or Extra load (for Class C1 tyres)	Limit for rolling sound dB(A) of Stage II	Limit for wet grip index	Limit for rolling resistance coefficient N/kN of Stage II
1	E9-026784	235/45ZR18 98W	Extra load	72	1.1	10.5
2	E9-026807	245/45ZR19 102Y	Extra load	72	1.1	10.5
3	E9-0222273	255/40ZR20 101W	Extra load	73	1.1	10.5

Worst Case Selection

Test size for rolling sound	:	255/40ZR20 101W XL
Because of	:	The largest nominal section width; or The largest nominal section width and the lowest aspect ratio; or The largest nominal section width and lowest aspect ratio and the largest rim diameter.
Test size for wet grip	:	255/40ZR20 101W XL
Because of	:	Any tyre size that meets the required limit value of the regulation plus (at least) the extra safety margin may represent the whole tyre type range. The new limit value is $1.21 < 1.62$ (Wet grip test result)
Test size for rolling resistance	:	235/45ZR18 98W XL
Because of	:	Lowest load index; or Calculated limit value = (RRC limit value R117 - $0.3 \times \text{N/kN}$) - $0.06 \times (\text{LI-candidate} - \text{LI lowest})$ The new limit value is $10.25 > 9.08$ (Rolling resistance test result)

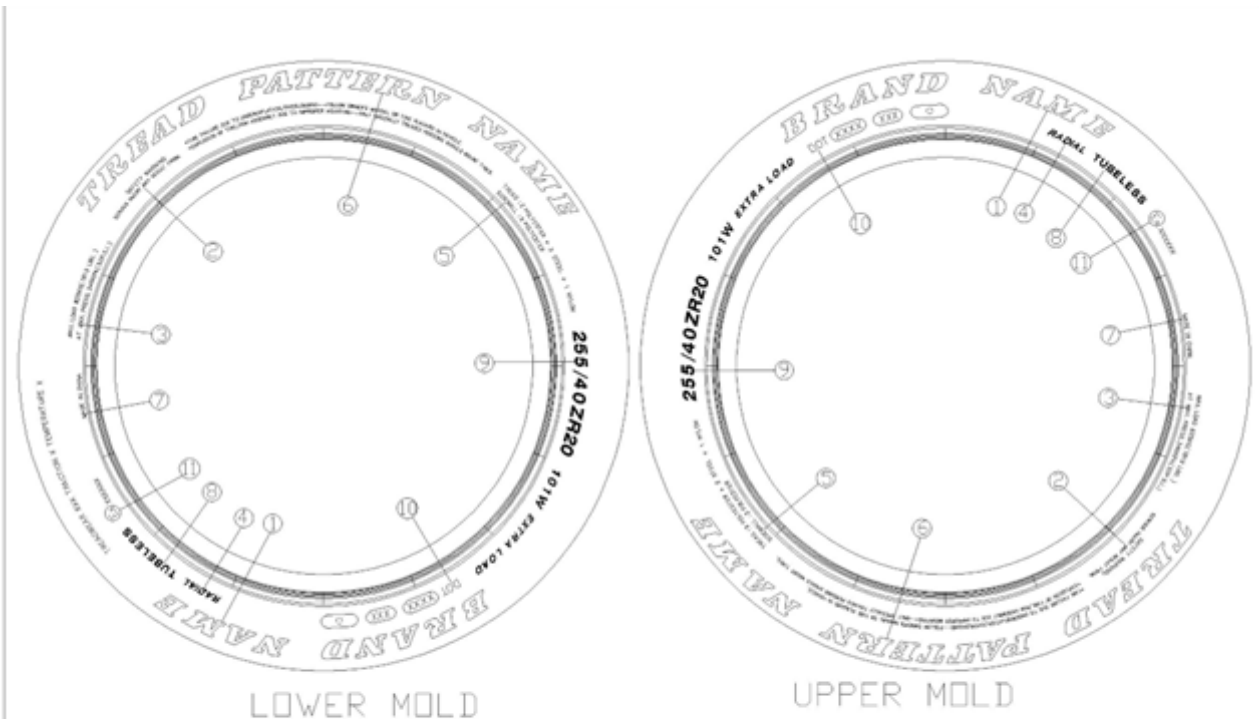
Attachment-2 Details of the major features

Drawing of the tread pattern (for measured tyre using for tyre noise, wet grip performance)		
Manufacturer name	:	SHANDONG YONGSHENG RUBBER GROUP CO., LTD.
Pattern name	:	XPOWER EV+
Tyre Size	:	255/40ZR20 101W XL
Market	:	EU
Pitch number	:	49
Pitch ratio (Max/Min)	:	0.85/0.92/1.00/1.08/1.15
Groove area ratio [%]	:	31 %
Width: main grooves [mm]	:	12.46/13.55/13.55/12.46
Depth: center groove [mm]	:	7.0
Depth: shoulder groove [mm]	:	5.3
Tyre tread pattern	:	

Drawing of the tread pattern (for measured tyre using for tyre rolling resistance performance)		
Manufacturer name	:	SHANDONG YONGSHENG RUBBER GROUP CO., LTD.
Pattern name	:	XPOWER EV+
Tyre Size	:	235/45ZR18 98W XL
Market	:	EU
Pitch number	:	49
Pitch ratio (Max/Min)	:	0.85/0.92/1.00/1.08/1.15
Groove area ratio [%]	:	31.2%
Width: main grooves [mm]	:	11.5/12.5/12.5/11.5
Depth: center groove [mm]	:	7.0
Depth: shoulder groove [mm]	:	5.3
Tyre mass [kg]		11.41
Tread depth [mm]		7.0
Tread width [mm]		202
Curvature radius of tread crown [mm]		1100
Tyre outer diameter [mm]		669
Tread plies		2 POLYESTER + 2 STEEL + 1 NYLON
Tyre tread pattern		

Attachment 3 Drawings or photographs of the tyre sidewall

Drawings of the sidewall
(for measured tyre using for tyre noise, wet grip)



1	TOURADO
2	SAFETY WARNING
3	MAX. LOAD 825KG (1819LBS.) AT MAX. PRESS. 340KPA(50P.S.I.)
4	RADIAL
5	TREAD : 2 POLYESTER + 2 STEEL + 1 NYLON SIDEWALL : 2 POLYESTER
6	XPOWER EV+
7	MADE IN CHINA
8	TUBELESS
9	255/40ZR20 101W EXTRA LOAD
10	DOT XXX XXR920 (XXXX-DATE CODE)
11	E9 02L498 S2WR2 0222273

Drawings of the sidewall
(for measured tyre using for tyre rolling resistance performance)



1	TOURADO
2	SAFETY WARNING
3	MAX. LOAD 750KG (1653LBS.) AT MAX. PRESS. 340KPA(50P.S.I.)
4	RADIAL
5	TREAD : 2 POLYESTER + 2 STEEL + 1 NYLON SIDEWALL : 2 POLYESTER
6	XPOWER EV+
7	MADE IN CHINA
8	TUBELESS
9	235/45ZR18 98W EXTRA LOAD
10	DOT XXX XXR920 (XXXX-DATE CODE)
11	(E9) 021498 SZVR2 026784