

**ECE TYPE-APPROVAL CERTIFICATE**



Communication concerning:<sup>2</sup> ~~Approval granted~~  
~~Approval extended~~  
~~Approval refused~~  
~~Approval withdrawn~~  
~~Production definitively discontinued~~

of a component type pursuant to Regulation No. 118.

Approval No: **E24 118R11-020104**

Extension No: *N/A*

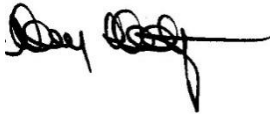
Reason for extension:

- *N/A*

**SECTION I**

- |       |   |   |
|-------|---|---|
| 1.1   | Make (trade name of manufacturer):                    | <i>Svensson</i>   |
| 1.2   | Type:   | <i>Mingel (colour: 8400)</i>  |
|       | Commercial Descriptions:                              | <i>Mingel (colour: 8400)</i>  |
| 1.3   | Means of identification of type, if marked on device: | <i>N/A</i>  |
| 1.3.1 | Location of that marking:                             | <i>N/A</i>  |
| 1.4   | Name and Address of Manufacturer:                     | <i>AB Ludvig Svensson<br/>Bangatan 8<br/>511 82 Kinna<br/>SWEDEN.</i> |
| 1.5   | Location of the approval mark:                        | <i>Attached to packaging (production material)</i>                    |
| 1.6   | Address(es) of assembly plant(s):                     | <i>AB Ludvig Svensson<br/>Bangatan 8<br/>511 82 Kinna<br/>SWEDEN.</i> |

**SECTION II**

1. Additional Information (where applicable): see Appendix 1 *See technical report L3RB0001-00 and manufacturer's information document for details.*
2. Technical service responsible for carrying out the tests: *SGS-TÜV Saar GmbH,  
Am TÜV 1,  
D-66280 Sulzbach,  
Germany.*
3. Date of test report: *25.01.2017*
4. Number of test report: *L3RB0001-00*
5. Remarks (If any): *N/A*
6. Place: *Dublin.*
7. Date: *02<sup>nd</sup> February, 2017.*
8. Signature: 
9. The index to the information package lodged with the approval authority, which may be obtained on request, is attached.



**Appendix 1**

**Appendix to type approval communication form No. E24 118RII-020104  
concerning the type approval of a component type pursuant to  
Regulation No. 118**

- |        |  |  |
|--------|--|--|
| 1.     | Additional information.  | <i>See technical report<br/>L3RB0001-00 and manufacturer's<br/>information document for details.</i> |
| 1.1.   | Interior materials   |  |
| 1.1.1. | The direction which the component may be installed:<br><del>horizontal / vertical</del> / both horizontal and vertical direction(s) <sup>1</sup> . | <i>Horizontal and vertical .</i>   |
| 1.1.2. | Fulfil the requirements in paragraph 6.2.2.:<br><del>yes</del> / not applicable <sup>1</sup> .   | <i>Not applicable.</i>   |
| 1.1.3. | Compliance has been checked for components approved<br>as complete devices: <del>yes</del> / no <sup>1</sup>                                       | <i>No.</i>   |
| 1.1.4. | Any restrictions of use and installation requirements:   | <i>See technical report<br/>L3RB0001-00 and manufacturer's<br/>information document for details</i>  |
| 1.2.   | Insulation materials   |  |
| 1.2.1. | The direction which the component may be installed:<br>horizontal / vertical / both horizontal and vertical direction(s) <sup>1</sup>              | <i>N/A</i>   |
| 1.2.2. | Compliance has been checked for components approved<br>as complete devices: yes / no <sup>1</sup>  | <i>N/A</i>   |
| 1.2.3. | Any restrictions of use and installation requirements:   |  |
| 1.3.   | Electric cables  |  |
| 1.3.1. | Any restrictions of use and installation requirements:   | <i>N/A</i>   |
| 2.     | Remarks:   | <i>N/A</i>   |

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

## **Index to the Information Package**

Date of issue:	<i>02<sup>nd</sup> February, 2017.</i>
Date of latest amendment:	<i>N/A</i>
Reason for extension/revision:	<i>N/A</i>
1. Additional conditions, and advisory notes on legal alternatives.	
2. Test report(s)	
- numbers(s):	<i>L3RB0001-00</i>
- date of issue:	<i>25.01.2017</i>
- date of latest amendment:	<i>N/A</i>
3. Information document	
- number(s):	<i>Mingel-8400-00</i>
- date of issue:	<i>20.01.2017</i>
- date of latest amendment:	<i>N/A</i>
Documentation:	<i>10 pages</i>

Appendix: **Additional conditions, and advisory notes on legal alternatives**

A: Additional conditions:

1. The attached technical report, with any of its attachments, forms part of this Type Approval certificate.
2. Each type from series production shall be to the measurements specified in the attached drawings, and shall be manufactured only from the materials specified in the Approval documents.
3. Changes in the type are permitted only with the explicit permission of NSAI. Breaches of this requirement will lead to a withdrawal of the Type Approval, and in addition may be subject to criminal prosecution.
4. At regular intervals, any tests or associated checks prescribed by the applicable legislation to verify continued conformity with the approved type shall be carried out. The manufacturer shall demonstrate compliance with this by submitting to NSAI evidence of adequate arrangements and documented control plans for each type approved.
5. Any set of samples or test pieces showing evidence of non-conformity shall give rise to further sampling and testing and all steps shall be taken to restore conformity of production.
6. This Type Approval will expire when it is surrendered by the holder, or withdrawn by NSAI, or when the approved type no longer conforms to legal requirements. The recall of the Type Approval can be issued by NSAI when the conditions required for the issuing or continuation of the Type Approval are no longer current, or when the Approval holder is in breach of the duties attached to the Type Approval, or when it is established that the approved type no longer meets the requirements of traffic safety.
7. Changes in the company name, address or manufacturing site, as well as in any of the sales or other agents specified in the issuing of the approval must immediately be notified to NSAI.
8. The duties imposed by the issuing of this certificate are not transferable. The legal protection of third parties is not affected by this certificate.
9. When the manufacture or sale of the system, component or separate technical unit has not been started within one year of the date of issue of this certificate, then NSAI is to be informed. This requirement also applies when the manufacture or sale has been halted for more than one year, or when it ought to have been halted for more than one year. The initial commencement of manufacture or sale, or the resumption of manufacture or sale, shall then be notified to NSAI within one month of commencement or resumption.

B: Legal Options:

Any objection to the requirements set out in this certificate shall be made within one month of the date of issue. The objection shall be made, in writing, to NSAI in Dublin.

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# Technical Report / *Technischer Bericht*

Test standard / *Prüfgrundlage*:

**UN-R 118**

Level of amendment / *Änderungsstand*:

**Supplement 2 to the 02 series of amendments /  
*Ergänzung 2 zur Änderungsserie 02***

Title / *Titel*:

**Burning behaviour of materials used in the interior construction  
of certain categories of motor vehicles  
*Brennverhalten von Werkstoffen der Innenausstattung  
bestimmter Kraftfahrzeugklassen***

Manufacturer / *Hersteller*:

**AB Ludvig Svensson**

Type / *Typ*:

**Mingel (colour: 8400)**

Subject of testing / *Gegenstand der Prüfung*:

**Component / *Komponente***

0	<b><u>General / Allgemeine Angaben:</u></b>	
0.1	Make (trade name of manufacturer) / <i>Fabrikmarke (Firmenname des Herstellers):</i>	Svensson
0.2	Type / Typ:	Mingel (colour: 8400)
0.2.1	Commercial description / <i>Handelsname:</i>	Mingel (colour: 8400)
0.3	Means of identification of type, if marked on the vehicle / <i>Merkmale zur Typidentifizierung, sofern am Fahrzeug vorhanden:</i>	n.a.
0.4	Category of vehicle / <i>Fahrzeugklasse:</i>	n.a.
0.5	Manufacturer's name and address / <i>Name und Anschrift des Herstellers:</i>	AB Ludvig Svensson Bangatan 8 511 82 Kinna SWEDEN
0.8	Name(s) and address(es) of assembly plant(s) / <i>Name(n) und Anschrift(en) der Fertigungsstätte(n):</i>	AB Ludvig Svensson Bangatan 8 511 82 Kinna SWEDEN
0.9	Name and address of representative / <i>Name und Anschrift des Beauftragten:</i>	n.a.

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1      **Test record /**  
**Prüfprotokoll:**

See appendix /  
*Siehe Anhang*

2      **Attachments /**  
**Anlagen:**

2.1      List of modifications /  
*Liste der Änderungen:*

2.2      Information folder /  
*Beschreibungsmappe:*

No. / Nr.: Mingel-8400-00

Date of issue /  
*Ausgabedatum:* 20.01.2017



**3 Statement of conformity / Schlussbescheinigung:**

The information folder as mentioned under no. 2.2 and the type described therein are in compliance with the test standard mentioned above. /

*Die unter Nr. 2.2 angegebene Beschreibungsmappe und der darin beschriebene Typ entsprechen der oben aufgeführten Prüfgrundlage.*

With regard to the required level of performance to be achieved, the test specimen were representative for the type to be approved. /

*Die verwendeten Prüfmuster waren im Hinblick auf das erforderliche Leistungsniveau für den zu genehmigenden Typ repräsentativ.*

The tests were carried out in accordance to the relevant requirements of the  
*Die Durchführung der Prüfungen entsprach den relevanten Anforderungen der*

EN ISO/IEC 17025:2005     EN ISO/IEC 17020:2012

**Test Laboratory / Prüflaboratorium**

**SGS-TÜV Saar GmbH**

notified by  
*benannt durch*

Kraftfahrt-Bundesamt (KBA),  
 Federal Republic of Germany

National Standards  
 Authority of Ireland (NSAI)

Rijksdienst voor het Wegverkeer  
 (RDW),  
 The Netherlands  
 No. 99050064 00

**No. KBA - P 00084 – 10**

**No. 101**

**Responsible expert**

**Signature**

Yalcin Calik

Jan 25, 2017



**Conformity check**

**Signature**

Michael Juschkat



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**Test record / Prüfprotokoll**

**1 Test object and measuring equipment / Testobjekt und Messeinrichtungen**

**1.1 Test object / Testobjekt**

Manufacturer's name and address / <i>Name und Anschrift des Herstellers:</i>	AB Ludvig Svensson Bangatan 8 511 82 Kinna SWEDEN
Type / Typ:	Mingel (colour: 8400)
Material / <i>Werkstoff:</i>	High quality upholstery fabric Composition: 100% Polyester (Trevira CS) Colour: 8400 Weight: 450 g/m <sup>2</sup>
Sample dimensions / <i>Maße Prüfmuster:</i>	560 mm x 170 mm, thickness / <i>Dicke:</i> 1,0 mm – 1,2 mm
Installation point or area / <i>Einbauort oder -lage:</i>	<input checked="" type="checkbox"/> horizontal / <i>horizontal</i>  <input checked="" type="checkbox"/> vertical / <i>vertikal</i>  <input type="checkbox"/> in the engine compartment / <i>im Motorraum</i>  <input type="checkbox"/> in separate heating compartments / <i>in abgetrennten Heizräumen</i>  <input type="checkbox"/> 500 mm above the seat cushion / <i>500 mm über dem Sitzpolster</i>
Conditioning of samples / <i>Konditionierung der Prüfmuster:</i>	min. 24 hours / <i>Stunden</i> at / <i>bei:</i> Temperature / <i>Temperatur:</i> 23°C ± 2°C Humidity / <i>Luftfeuchte:</i> 50% ± 5%
<b>Remark /          Bemerkung:</b>	n.a.

- 1.2 **Equipment for measuring and testing /** Slide gauge / *Schieblehre*  
**Mess- und Prüfeinrichtungen:** Measuring tape / *Maßband*  
 Stop watch / *Stoppuhr*  
 Bunsen burner / *Bunsenbrenner*  
 Weather station / *Wetterstation*  
 Apparatus for testing the verticale burning  
 behaviour / *Vorrichtung für die Prüfung*  
*des vertikalen Brennverhaltens*

**2 Tests / Prüfungen**

- 2.1 ↔ **Burning rate in horizontal direction /**  n.a.  
**Brenngeschwindigkeit in horizontaler Richtung**  
 (ECE R-118 An. 6)

Test sample <i>Prüfmuster</i>	1	2	3	4	5	Max.	Limit
Burning rate / <i>Brennge- schwindigkeit</i> mm/min	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	100

The result of the test shall be considered satisfactory if, taking the worst test results into account, the horizontal burning rate is not more than 100 mm/minute or if the flame extinguishes before reaching the last measuring point. /

*Das Prüfergebnis gilt als zufriedenstellend, wenn unter Berücksichtigung der ungünstigsten Prüfergebnisse die horizontale Brenngeschwindigkeit nicht mehr als 100 mm/Minute beträgt oder die Flamme vor Erreichen des letzten Messpunkts erlischt.*

- fulfilled / *erfüllt*  
 not fulfilled / *nicht erfüllt*  
 n.a.

**Remark / Bemerkung:**

Materials fulfilling the requirements of the vertical burning behaviour are considered to fulfil the requirements of the horizontal burning behaviour.  
 (see ECE-R118-02 item 6.2.1) / *Bei Materialien, die die Anforderungen des vertikalen Brennverhaltens erfüllen, kann davon ausgegangen werden, dass sie die Anforderungen des horizontalen Brennverhaltens erfüllen.*  
 (siehe ECE-R118-02 Punkt 6.2.1)

2.2  **Melting behaviour / Schmelzverhalten**  n.a.  
 (ECE R-118 An. 7)

2.3  **Burning rate in vertical direction / Brenngeschwindigkeit in vertikaler Richtung**  n.a.  
 (ECE R-118 An. 8)

**Direction: cross / Richtung: quer**

Test sample <i>Prüfmuster</i>	1	2	3
d <sub>1</sub> , d <sub>2</sub> , d <sub>3</sub>	0 / - / -	0 / - / -	0 / - / -
t <sub>1</sub> , t <sub>2</sub> , t <sub>3</sub>	0 / - / -	0 / - / -	0 / - / -
v <sub>1</sub> , v <sub>2</sub> , v <sub>3</sub>	0 / - / -	0 / - / -	0 / - / -



Sample before testing /  
*Probe vor der Prüfung*



Sample before testing /  
*Probe nach der Prüfung*

**Direction: longitudinal / Richtung: längs**

Test sample <i>Prüfmuster</i>	1	2	3
d <sub>1</sub> , d <sub>2</sub> , d <sub>3</sub>	0 / - / -	0 / - / -	0 / - / -
t <sub>1</sub> , t <sub>2</sub> , t <sub>3</sub>	0 / - / -	0 / - / -	0 / - / -
v <sub>1</sub> , v <sub>2</sub> , v <sub>3</sub>	0 / - / -	0 / - / -	0 / - / -



Sample before testing /  
*Probe vor der Prüfung*



Sample before testing /  
*Probe nach der Prüfung*

The result of the test shall be considered satisfactory if, taking the worst test results into account, the vertical burning rate is not more than 100 mm/minute. / *Das Prüfergebnis gilt als zufriedenstellend, wenn unter Berücksichtigung der ungünstigsten Prüfergebnisse die vertikale Brenngeschwindigkeit nicht mehr als 100 mm/Minute beträgt.*

- fulfilled / *erfüllt*
- not fulfilled / *nicht erfüllt*
- n.a.

Remark / *Bemerkung:*

After a flaming time of 5 seconds the material burned less than 10 seconds and extinguished. / *Nach einer Beflammungszeit von 5 Sekunden erlöschte das Material in weniger als 10 Sekunden.*

2.4 **Capability to repel fuel or lubricant / *Fähigkeit Kraftstoff oder Schmiermittel abzustoßen*** (ECE R-118 An. 9)  n.a.

2.5 **Required tests for electric cables / *Erforderliche Prüfungen elektrische Leitungen***  n.a.

3 **Place and date of Test / *Ort und Datum der Prüfung:*** SGS Germany GmbH CTS CQE  
 Munich / *München*  
 24.01.2017

4 **Remarks / *Bemerkungen:*** not applicable / *nicht zutreffend*

**List of modifications /  
*Liste der Änderungen***

- |   |   |     |
|---|---|-----|
| 1 | Correction of /<br><i>Es wird berichtigt:</i> | --- |
| 2 | Modification of /<br><i>Es wird geändert:</i> | --- |
| 3 | Addition of /<br><i>Es wird hinzugefügt:</i>  | --- |
| 4 | Deletion of /<br><i>Es entfällt:</i>          | --- |

**INFORMATION DOCUMENT****1. GENERAL**

**1.1. Make (trade name of manufacturer):** Svensson

**1.2. Type and general commercial description(s):** Mingel (colour: 8400)

**1.3. Name and address of manufacturer:**

AB Ludvig Svensson  
Bangatan 8  
511 82 Kinna  
SWEDEN

**1.4. In the case of components and separate technical units, location and method of affixing of the approval mark:** Attached to packaging (production material)

**1.5. Address(es) of assembly plant(s):**

AB Ludvig Svensson  
Bangatan 8  
511 82 Kinna  
SWEDEN

**2. INTERIOR MATERIALS**

**2.1. Material(s) intended for ~~horizontal / vertical / horizontal and vertical~~ installation<sup>(1)</sup>**

**Material intended to be installed more than 500mm above the seat cushion and/or in the roof of the vehicle: ~~yes/~~ not applicable<sup>(1)</sup>**

**2.2. Base material(s)/designation:**

High quality upholstery fabric  
Composition: 100% Polyester (Trevira CS)  
Colour: 8400  
Weight: 450 g/m<sup>2</sup>

**2.3. ~~Composite/single~~<sup>(1)</sup> material, number of layers<sup>(1)</sup>:** 1 layer

**2.4. Type of coating<sup>(1)</sup>:** N/A

**2.5. Maximum/minimum thickness:** min. 1,0 mm and max. 1,2 mm

**2.6. Type-approval number, if available:** N/A

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