



GRAND-DUCHÉ DE LUXEMBOURG

Ministère du Développement durable
et des Infrastructures

Département des Transports

L-2938 Luxembourg

SOCIÉTÉ NATIONALE DE
CERTIFICATION ET D'HOMOLOGATION

s.à r.l.

Registre de Commerce: B 27180

L-5201 Sandweiler



Référence: E13*104R00*104R00*0002*00

Annexes: - Rapport technique
- Fiche de renseignements du constructeur

Sandweiler, le 10 mars 2010

COMMUNICATION



concernant 2/: - **DELIVRANCE D'UNE HOMOLOGATION**
concerning 2/: APPROVAL GRANTED
- **EXTENSION D'HOMOLOGATION**
APPROVAL EXTENDED
- **REFUS D'HOMOLOGATION**
APPROVAL REFUSED
- **RETRAIT D'HOMOLOGATION**
APPROVAL WITHDRAWN
- **ARRET DEFINITIF DE LA PRODUCTION**

de marquage rétro réfléchissant pour véhicules lourds et longs et leur remorques, conformément au Règlement N° 104
of retro-reflective markings of heavy and long vehicles and their trailers, pursuant to Regulation N° 104

Numéro d'homologation:
Approval number:

E13*104R00*104R00*0002*00

Marque d'homologation:
Approval mark:

refer to the manufacturer's information document

- Nom commercial de marquage rétro réfléchissant:**
Trade name mark of the marking material: AVERY DENNISON
type: V-6750 B
- Classe de matériau de marquage 2/:**
Class of the marking material 2/: C / ~~D~~ / E
- Nom et adresse du fabricant:**
Name and address of the manufacturer: AVERY DENNISON Reflective Products
6565 W Howard St
Niles IL 60714 (USA)
- Le cas échéant, nom et adresse du représentant du fabricant:**
If applicable, name and address of the manufacturer's representative: PREALUX srl
Via A. Berlese, 1
I-24124 Bergamo (BG)
- Date à laquelle le matériau de marquage à été soumis aux essais d'homologation:**
Date on which the marking material was submitted for approval test: 26.02.2010

6. **Autorité déléguée:** *Société Nationale de Certification et d'Homologation*
Assigned authority: *L-5201 Sandweiler*
- Service technique chargé des essais d'homologation:**
Technical service responsible for carrying out the approval tests: Luxcontrol SA
B.P. 349
L-4004 Esch-sur-Alzette
7. **Date du procès-verbal délivré par le service technique:** 09.03.2010
Date of test report issued by the technical service:
8. **Numéro du procès-verbal délivré par le service technique:** LCA 54 588 001 10
Number of test report issued by the technical service:
9. **Observations:** not applicable
Remarks:
10. **Homologation 2:** accordée / ~~refusée~~ / ~~étendue~~ / ~~retirée~~
Approval 2/: granted / ~~refused~~ / ~~extended~~ / ~~withdrawn~~
11. **Motif(s) de l'extension d'homologation (le cas échéant):** not applicable
Reason(s) for the extension (if applicable):
12. **Fait à:** Sandweiler
Place:
13. **Date:** 10 mars 2010
Date:
14. **Signature:**
Signature:

Pour le Département des Transports



Marco FELTES
Inspecteur Principal

Pour la SNCH



Claude LIESCH
Directeur

15. **La liste des documents constituant le dossier d'homologation déposés auprès du service administratif qui a délivré l'homologation, et qui est annexée à la présente communication, peut être obtenue sur demande.**

Annexed is a list of documents making up the approval file, deposited with the competent authority which granted approval; a copy can be obtained on request.

voir "INDEX DU DOSSIER D'HOMOLOGATION" ci-joint / see "INDEX TO TYPE-APPROVAL REPORT"



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L-5201 Sandweiler

Référence: E13*104R00*104R00*0002*00

Annexes: - Rapport technique
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Sandweiler, le 10 mars 2010

Index du dossier d'homologation

Index to type-approval

	Numéro d'homologation: Approval number:	E13*104R00*104R00*0002*00
	Révision: Revision:	00
	Marque de fabrication ou de commerce: Trade name or mark:	AVERY DENNISON
	Type: Type:	V-6750 B
1.	Procès-verbal d'essai: Test report:	N° LCA 54 588 001 10
	- Technical report:	Pages 1 to 5
	- Index to information package:	Annex A, Page 1
2.	Dossier du constructeur: Report of the manufacturer:	N° --
	- Information folder:	Annex B, Pages 1 to 3
3.	Autres documents annexés: Other documents annexed:	not applicable
4.	Date de délivrance de l'homologation initiale: Date of issue of initial type approval:	10.03.2010
5.	Date de la dernière délivrance de pages révisées: Date of last issue of revised pages:	not applicable
6.	Date de la dernière délivrance d'une homologation révisée: Date of last extension:	not applicable

TECHNICAL REPORT

No.: LCA 54 588 001 10

Inspection concerning the

APPROVAL OF RETRO-REFLECTIVE MARKINGS FOR HEAVY AND LONG VEHICLES AND THEIR TRAILERS

performed according to

ECE-Regulation No. 104

Type: **V-6750 B**
Manufacturer: **AVERY DENNISON Reflective Products**
6565 W Howard St
Niles IL 60714 (USA)

Extension -- to ECE Type Approval no.: not applicable

Index:

1. General	Page	2
2. Inspections and their results	Page	3
3. Evaluation of test results	Page	4
4. Statement of compliance	Page	5
5. Annex (beginning with an index)		

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1. **General**

1.1. **Test Provisions**

The inspection was carried out according to the requirements of the ECE-Regulation No. 104 including Supplement 5 to the 00 series of amendments which entered into force on July 11, 2008.

1.2. **Information concerning the vehicle type and the requested approval**

The statements below apply to the previous ECE type-approval as referred to on page 1.

1.2.1. **[] Numbering according to the communication concerning the approval following ECE-R104.**

[1.] Trade name or mark of the marking material:

AVERY DENNISON

[2.] Class of marking material: **C/D/E**

[3.] Name and address of manufacturer:

**AVERY DENNISON Reflective Products
6565 W Howard St
Niles IL 60714 (USA)**

[4.] If applicable, name and address of manufacturer's representative:

**PREALUX srl
Via A. Berlese, 1
I-24124 Bergamo (BG)**

[5.] Date on which the marking material was submitted for approval test:

26.02.2010

[9.] Remarks:

Not applicable

...



2. Inspections and their results

2.1. Version of the tested ~~vehicle~~ / ~~technical unit~~ / component

Following samples have been used for testing:

- device: V-6750 B
- all described versions and variants

2.2. Inspection items

	Location of test:	Date of receipt of test item:	Date of test:	Inspector
Main report	Eurolens s.r.l. Via Bergamo, 2 I-20030 Paderno Dugno (MI)	26.02.2010	26.02.2010	P. Vinciarelli

2.2.1. Markings:

The trade name and other marks are in accordance with the requirements of item 4. of the regulation.

2.2.2. General specifications

The marking material is manufactured so that they function satisfactory and will continue to do so in normal use. It has no defect in design, which is detrimental to their efficient operation or to their maintenance.

The retro-reflective marking material is not to be easily dismantled.

The means of attachment of the marking material is fitted in a durable and stable way.

The retro-reflective marking material is easy to clean, as its surface does not exhibit any roughness or protuberances.

2.2.3. Special specifications

2.2.3.1. Shape and dimensions:

The shape and dimension of the retro-reflective marking material fulfil the requirements set in Annex 5 of the Regulation.

2.2.3.2. Colorimetric specifications:

The retro-reflective marking material can be white, red or yellow colour. Their chromaticity co-ordinates fulfil the requirements set in Annex 6 of the Regulation.

...



2.2.3.3. Photometric specifications:

The photometric specifications of the retro-reflective marking material fulfill the requirements of the minimum value for the coefficient of retro-reflection R' set in table 1 and table 2 of Annex 7 of the Regulation.

2.2.3.4. Resistance to external agents:

The specimen submitted to the tests for resistance to external agents fulfilled the requirements to resistance to weathering, to corrosion, to fuels, to cleaning, to penetration of water set in the Annex 8 of the Regulation satisfactory.

2.2.3.5. Resistance to heat:

The specimen submitted to the tests for resistance to heat showed no distortions or curvatures nor cracking after the test procedure set in the Annex 8 of the Regulation.

2.3. Remark

2.3.1. General

Inspection results are only applicable to items, which have been tested.

2.4. Test facilities

Calibration of measuring and test equipment used to carry out the inspections is in accordance with the EEC-Directive and/or ECE-Regulation stated in 1.1. of this report and with ISO 17025.

Inspectors stated under 2.3. of this report were in charge of performing and/or evaluating the tests.

3. Evaluation of test results

3.1. Variants and components covered

The tests carried out cover the following variations of the marking material:

- **Retro-reflective marking material colours as stated in the information document**

3.2. Remarks

3.2.1. Main report:

Not applicable.

...



4. **Statement of compliance**

The inspections and measurements carried out have shown the compliance of the device described in this report and the attached Annex with the requirements of the ECE-Regulation No. 104 including Supplement 5 to the 00 series of amendments which entered into force on July 11, 2008.

Esch/Alzette, March 9, 2010

Luxcontrol s.a.
Service Homologation-automobile

Patrizio Vinciarelli
Ingénieur-Inspecteur

Angelo Tomasini
Ingénieur-Inspecteur

Annex



Index to the information package, including a summary in chronological order, concerning extensions and/or amendments

EEC type-approval No.: --

Main Report

Technical Report No.: LCA 54 588 001 10 Pages 1 to 5

Composition of the Annex:

A: Index Page 1

B: Information folder Pages 1 to 3

Index to the information folder:

- Manufacturer's information document (pages 1 to 3)
-

Reflective Films Division

Avery Dennison® V-6750B Conspicuity Tape
Prismatic Grade Conspicuity Tape for Enhanced Visibility
and Vehicle Recognition - ECE 104 / Class C

Data Bulletin # PDB V-6750B

Dated: 02FEB10

Description:

Avery Dennison® V-6750B Series reflective tape for use on pvc curtain sided vehicles. It is a high quality, durable, self-adhesive, prismatic cube corner retroreflective tape and is designed for use on vehicles for easy nighttime vehicle recognition and increased road safety. V-6750B complies with ECE 104, Class C requirements.

Construction:

Pre-Mask:	Polymeric film
Face Film:	Prismatic reflective film
Adhesive	Permanent, acrylic pressure sensitive
Liner:	Polymeric film

Warranted Photometric Performance:

Minimum coefficient of retroreflection (R') in (cd / lx / m²) according to ECE 104, Class C

Observation Angle	Entrance Angle	White	Yellow	Red
0.33°	5°	450	300	120
	20°	/	/	60
	30°	200	130	30
	40°	90	75	10
	60°	16	10	/

Entrance angle is defined in C.I.E. notation by its β_2 component. β_1 & ϵ are held at 0°.

Colors & Specification Limits (Daytime):

Daytime colorimetric requirements according to ECE 104, Class C.

Color	1		2		3		4		Luminance (Y%)	
	x	y	x	y	x	y	x	y	Min	Max
White	0.300	0.270	0.385	0.355	0.345	0.395	0.260	0.310	25	--
Yellow	0.545	0.454	0.487	0.423	0.427	0.483	0.465	0.534	16	--
Red	0.690	0.310	0.595	0.315	0.560	0.350	0.650	0.350	3	--

The four pairs of chromaticity coordinates and luminance range determine the acceptable color for new materials when measured with CIE Standard Illuminant D65 and 45°/0° geometry.

Colors & Specification Limits (Night-time):

Daytime colorimetric requirements according to ECE 104, Class C.

Color	1		2		3		4	
	x	y	x	y	x	y	x	y
White	0.417	0.359	0.373	0.402	0.450	0.513	0.548	0.414
Yellow	0.585	0.385	0.610	0.390	0.520	0.480	0.505	0.465
Red	0.720	0.258	0.735	0.265	0.665	0.335	0.643	0.335

The four pairs of chromaticity coordinates determine the acceptable color for new materials when illuminated with CIE Standard Illuminant A at an entrance angle of $\beta_1 = \beta_2 = 0$, or, if this produces a colorless surface reflection, angle $\beta_1 = 0$, $\beta_2 = +5$, and measured at an observation angle of $\alpha = 0.33$.



Reflective Films Division

Avery Dennison® V-6750B continued...

Other Specifications:

The following information on physical and chemical characteristics is based upon tests believed to be reliable. The values are intended only as a source of information. They are given without guaranty and do not constitute a warranty. The purchaser should independently determine, prior to use, the suitability of this material for his/her specific purpose. (Data represents averages and is not intended for use as a specification).

Physical Properties:

Outdoor Durability	3 years when properly processed and applied (vertical exposure).
Minimum Surface & Ambient Air Application Temperature	16°C
Application Surface	Avery approved curtains, not older than 6 months. Wet method of application is not recommended for V-6750B.
Service Temperature Range	-40°C to 80°C
Typical Film Caliper (w/Adhesive)	230µm to 255µm
Shelf Life	One year when stored at the following temperature and conditions: 20° - 25°C and 50% ± 5% R.H.
Other Tests	Meets or exceeds applicable requirements outlined for ECE-104, Class V-6750B materials including color fastness, stability of photometric properties, resistance to weathering, corrosion, fuels, heat, cleaning and penetration of water.
Application Guidelines	<ul style="list-style-type: none"> • Do not overlap sheeting • Application underneath belts or buckles is not recommended • Remove pre-mask using a 180° peel off angle • Curtain must remain undisturbed for 2 hours after application • Allow 72 hours before washing

Color & Size Configurations Available:

Color Availability	V-6750B White V-6751B Yellow V-6772B Red
Width	50.8 mm wide roll
Roll Length	50 meters

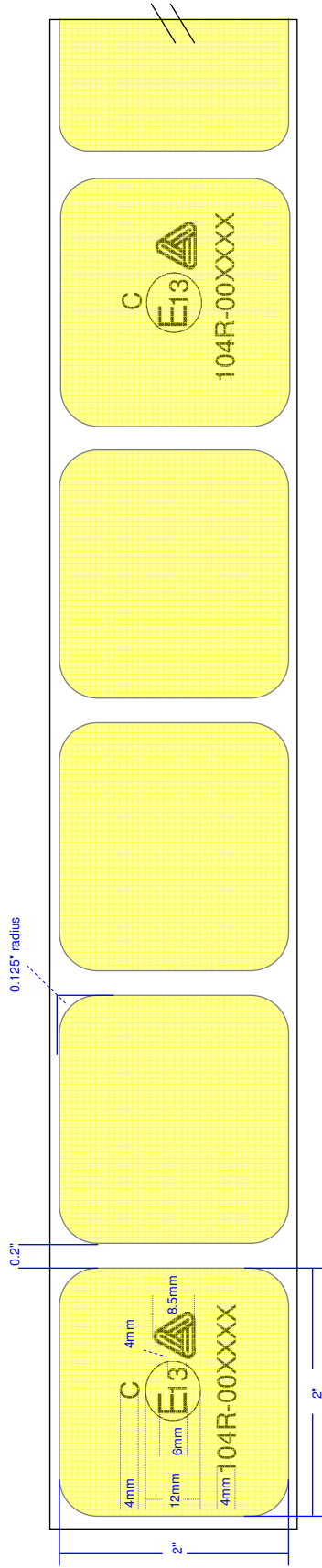
WARRANTY: All statements, technical information and recommendations about Avery Dennison products are based upon tests believed to be reliable but do not constitute a guarantee or warranty. All Avery Dennison products are sold with the understanding that Purchaser has independently determined the suitability of such products for its purposes. Avery Dennison products are warranted to be free from defects in material and workmanship for either one year (or the period stated on the specific product information literature in effect at time of delivery, if longer) from date of shipment if said product is properly stored and applied. It is expressly agreed and understood that Avery Dennison's sole obligation and Purchaser's exclusive remedy under this warranty, under any other warranty, express or implied, or otherwise, shall be limited to repair or replacement of defective product without charge at Avery Dennison's plant or at the location of product (at Avery Dennison's election), or in the event replacement or repairs is not commercially practical, to Avery Dennison's issuing Purchaser a credit reasonable in light of the defect in the product.

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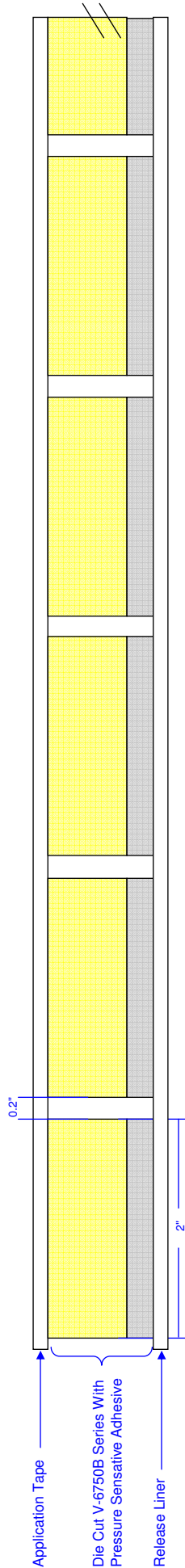


TOP VIEW



note: approval markings appear every 4th piece

CROSS SECTION




Date: 4 MAR 2010

Proof #: V-6750B Series White, Yellow, and Red

Revision #: 0

Description: Top and side view of 2"x2" die cut parts with application tape and release liner



AVERY DENNISON