

VP Engineering
THERMAFLEX INTERNATIONAL HOLDING B V
VEERWEG 1
5145 NS WAALWIJK NOORD-BRABANT
THE NETHERLANDS

Date: 2012/06/18 Subscriber: 100512300 PartySite: 1793552 File No: E321109 Project No: 11CA36586 PD No: 12M29113

Type: F

PO Number:

Subject: Procedure And/Or Report Material

The following material resulting from the investigation under the above numbers is enclosed.

Issue

Date	Vol	Sec	<u>Pages</u>	Revised Date
	1		Revised Authorization Page(s)	2012/06/15
	1		Rec Comp Mark Data Pgs	
	1		Appendix	
2012/06	/15		Add New Indep Report	

Please file revised pages and illustrations in place of material of like identity. New material should be filed in its proper numerical order.

NOTE: Follow-Up Service Procedure revisions DO NOT include Cover Pages, Test Records and Conclusion Pages. Report revisions DO NOT include Authorization Pages, Indices, Section General Pages and Appendixes.

Please review this material and report any inaccuracies to UL's Customer Service Professionals. Contact information for all of UL's global offices can be found at http://www.ul.com/global/eng/pages/corporate/contactus.

If you'd like to receive updated materials FASTER, UL offers electronic access and/or delivery of this material. For more details, contact UL's Customer Service Professionals as shown above.

This material is provided on behalf of UL LLC(UL) or any authorized licensee of UL.

ARN File

CERTIFICATE OF COMPLIANCE

Certificate Number 20120618-E327224

Report Reference E321109-20111114

Issue Date 2012-JUNE-18

Issued to: TIM AISLANTES S A DE C V

AVENIDA 25 MZA 49 LOCAL 2 77710 PLAYA DEL CARMEN

QROO MEXICO

This is to certify that COMPONENT - PLASTICS

representative samples of Thermoplastic Elastomer (TPE), Thermaflex A/C, ThermaSmart

Polyolefin, Thermasmart PRO (a). (a) - Density is 0.21-0.23 g/cc

Have been investigated by UL in accordance with the Standard(s) indicated on

this Certificate.

Standard(s) for Safety: The Standard for Tests for Flammability of Plastic Materials for Parts in

Devices and Appliances, UL94

The Standard for Polymeric Materials - Short Term Property Evaluations,

UL746A

The Evaluation of Properties of Polymeric Materials, CAN/CSA-C22.2 No. 017-

00

Additional Information: See the UL Online Certifications Directory at www.ul.com/database for

additional information

Only those products bearing the UL Recognized Component Marks for the U.S. and Canada should be considered as being covered by UL's Recognition and Follow-Up Service and meeting the appropriate U.S. and Canadian requirements.

The UL Recognized Component Mark for the U.S. generally consists of the manufacturers identification and catalog number, model number or other product designation as specified under Marking for the particular Recognition as published in the appropriate UL Directory. As a supplementary means of identifying products that have been produced under UL s Component Recognition Program, UL s Recognized Component Mark: N. may be used in conjunction with the required Recognized Marks. The Recognized Component Mark is required when specified in the UL Directory preceding the recognitions or under Markings for the indivi dual recognitions. The UL Recognized Component Mark for Canada consists of the UL Recognized Mark for Canada: N and the manufacturers identification and catalog number, model number or other product designation as specified under Marking for the particular Recognition as pub lished in the appropriate UL Directory.

The final acceptance of the component is dependent upon its installation and use in complete equipment submitted to UL LLC.

Look for the UL Recognized Component Mark on the product.

This is to certify that representative samples of the product as specified on this certificate were tested according to the current UL requirements.

William R. Carney, Director, North American Certification Programs

UL LLC

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL. For questions, please contact a local UL Customer Service Representative at www.ul.com/contactus



File E321109 Vol 1 Auth. Page 1 Issued: 2009-01-15 Revised: 2012-06-13

FOLLOW-UP SERVICE PROCEDURE (TYPE R)

COMPONENT - PLASTICS (QMFZ2,QMFZ8)

Manufacturer: SEE ADDENDUM FOR MANUFACTURER LOCATIONS

1793552 (Party Site)

Applicant: THERMAFLEX INTERNATIONAL HOLDING B V

(100512-300) VEERWEG 1

5145 NS WAALWIJK NOORD-BRABANT

THE NETHERLANDS

1795063 (Party Site)

Recognized Company: TIM AISLANTES S A DE C V (E327224)

(100512-574) AVENIDA 25 MZA 49 LOCAL 2

77710 PLAYA DEL CARMEN

QROO MEXICO

This Follow-Up Service Procedure authorizes the above Manufacturer(s) to use the marking specified by UL LLC, or any authorized licensee of UL LLC, including the UL Contracting Party, only on products when constructed, tested and found to be in compliance with the requirements of this Follow-Up Service Procedure and in accordance with the terms of the applicable service agreement with UL Contracting Party and any applicable Service Terms. The UL Contracting Party for Follow-Up Services is listed on addendum to this Follow-Up Service Procedure ("UL Contracting Party"). UL Contracting Party and UL LLC are referred to jointly herein as "UL."

UL further defines responsibilities, duties and requirements for both Manufacturers and UL representatives in the document titled, "UL Mark Surveillance Requirements" that can be located at the following web-site: http://www.ul.com/fus and in the document titled "UL and Subscriber Responsibilities" that can be located at the following website: http://www.ul.com/responsibilities. Manufacturers without Internet access may obtain the current version of these documents from their local UL customer service representative or UL field representative. For assistance, or to obtain a paper copy of these documents or the applicable Service Terms, please contact UL's Customer Service at http://www.ul.com/global/eng/pages/corporate/contactus, select a location and enter your request, or call the number listed for that location.

The Applicant, the specified Manufacturer(s) and any Recognized Company in this Follow-Up Service Procedure must agree to receive Follow-Up Services from UL Contracting Party. If your applicable agreement is a Global Services Agreement ("GSA") with an effective date of January 1, 2012 or later and this Follow-Up Service Procedure is issued on or after that effective date, the Applicant, the specified Manufacturer(s) and any Recognized Company will be bound to a Service Agreement for Follow-Up Services upon the earliest by any Subscriber of use of the prescribed UL Mark, acceptance of the factory inspection, or payment of the Follow-Up Service fees which will incorporate such GSA, this Follow-Up Service Procedure and the Follow-Up Service Terms which can be accessed by clicking here:

http://www.ul.com/contracts/Terms-After-12-31-2011. In all other events, Follow-Up Services will be governed by and incorporate the terms of your applicable service agreement and this Follow-Up Service Procedure.

File E321109 Vol 1 Auth. Page 2 Issued: 2009-01-15 Revised: 2012-06-13

It is the responsibility of the Recognized Company to make sure that only the products meeting the aforementioned requirements bear the authorized Marks of UL LLC, or any authorized licensee of UL LLC.

This Follow-Up Service Procedure contains information for the use of the above Manufacturer(s) and representatives of UL and is not to be used for any other purpose. It is provided to the Manufacturer with the understanding that it will be returned upon request and is not to be copied in whole or in part.

This Follow-Up Service Procedure, and any subsequent revisions, is the property of UL and is not transferable. This Follow-Up Service Procedure contains confidential information for use only by the above named Manufacturer(s) and representatives of UL and is not to be used for any other purpose. It is provided to the Subscribers with the understanding that it is not to be copied, either wholly or in part unless specifically allowed, and that it will be returned to UL, upon request.

Capitalized terms used but not defined herein have the meanings set forth in the GSA and the applicable Service Terms or any other applicable UL service agreement.

UL shall not incur any obligation or liability for any loss, expense or damages, including incidental, consequential or punitive damages arising out of or in connection with the use or reliance upon this Follow-Up Service Procedure to anyone other than the above Manufacturer(s) as provided in the agreement between UL LLC or an authorized licensee of UL LLC, including UL Contracting Party, and the Manufacturer(s).

UL LLC has signed below solely in its capacity as the accredited entity to indicate that this Follow-Up Service Procedure is in compliance with the accreditation requirements.

William R. Carney Director North American Certification Program File E321109 Vol 1 Addendum To Page 1 Issued: 2009-01-15 Authorization Page Revised: 2012-06-13

LOCATION

1622897 (Party Site)

(100410-150) THERMAFLEX ISOLATIE B V

VEERWEG 1

5140 AM WAALWIJK THE NETHERLANDS

Factory ID:

UL Contracting Party for above site is: UL AG

1831661 (Party Site) (100520-582) THERMAFLEX IZOLACJI SP Z O O

UL PRZEMYSLOWA 6

58-130 ZAROW POLAND

Factory ID:

UL Contracting Party for above site is: UL AG

Recognized Component Marking Data Page (RCMDP)

(FILE IMMEDIATELY AFTER AUTHORIZATION PAGE)

RECOGNIZED COMPONENT MARKING

Products Recognized under UL's Component Recognition Service are identified by marking elements consisting of:

- 1. The Recognized Company's identification specified in this document.
- 2. A catalog, model or other applicable product designation specified in the descriptive sections of this document.
- 3. The UL Recognized Component Mark shown below is optional unless required elsewhere in the Procedure.

Only those components, which actually bear the Marking, should be considered as being covered under the Recognition Program. The UL Listing or Classification Mark is not authorized for use on or in connection with Recognized Components.

Recognized Component Mark



Minimum size of the Recognized Component Mark is not specified as long as it is legible. Minimum height of the registered symbol \$ shall be 3/64 inch but may be omitted if it is out of proportion to the Recognized Component Mark or not legible to the naked eye.

The manufacturer may reproduce the Mark electronically. Any decision regarding the acceptability of the manufacturer's Mark reproduction will be made at the Reviewing Office.

Recognized Component Marking Data Page (RCMDP)

(FILE IMMEDIATELY AFTER AUTHORIZATION PAGE)

RECOGNIZED COMPONENT MARKING

Products Recognized under UL's Component Recognition Service are identified by marking elements consisting of:

- The Recognized Company's identification specified in this document.
- 2. A catalog, model or other applicable product designation specified in the descriptive sections of this document.
- 3. The UL Recognized Component Mark shown below is optional unless required elsewhere in the Procedure:
 - (A) Recognized only to Canadian safety requirements, or;
 - (B) Recognized to both U.S. and Canadian safety requirements.

Only those components, which actually bear the Marking, should be considered as being covered under the Recognition Program. The UL Listing or Classification Mark is not authorized for use on or in connection with Recognized Components.

Recognized Component Mark



Minimum size of the Recognized Component Mark is not specified as long as it is legible. Minimum height of the registered symbol \$ shall be 3/64 inch but may be omitted if it is out of proportion to the Recognized Component Mark or not legible to the naked eye.

The manufacturer may reproduce the Mark electronically. Any decision regarding the acceptability of the manufacturer's Mark reproduction will be made at the Reviewing Office.

File E321109 Vol. 1 Sp. App. B Page 1 Issued: 2011-11-14 (File behind Appendix D) Revised: 2012-06-15

COMPONENT - PLASTICS (QMFZ2, QMFZ3, QMFZ8, QMFZ9)

TABLE B - INDEX TO TESTING

Sample Group		Generic Class	Material Designation	Report Date	Thk, mm	Color	Flame	IR Ref	TGA Ref	DSC Ref	GC Ref	Additional Info	Test Program Code
1	1	Thermoplastic Elastomer (TPE)											
			Thermaflex A/C, ThermaSmart	2009-01-07	6.0	BK	HF-1	T06-01-10	T03-19-10	T06-13-10		Density range 0.030- 0.035 g/cc	С
2	1	Polyolefin											
			Thermasmart PRO (a)	2012-06-15	6.0	вк	HF-1	T06-04-12	T03-25-12	T07-28-12	_	-	С

File E321109 Vol. 1 Sp. App. B Page 2 Issued: 2011-11-14 (File behind Appendix D) Revised: 2012-06-15

COMPONENT - PLASTICS (QMFZ2, QMFZ3, QMFZ8, QMFZ9)

INDEX TO FOOTNOTES:

(a) - Density is 0.21-0.23 g/cc

File E321109

Project 11CA36586

June 15, 2012

Report

on

Component - Plastics

THERMAFLEX INTERNATIONAL HOLDING B V

NL

Copyright © 2012 UL LLC

UL LLC authorizes the above-named company to reproduce this Report provided it is reproduced in its entirety.

File E321109 Page T1-1 of 2 Issued: 2012-06-15

TEST RECORD NO. 1

SAMPLES:

Specimens of the materials noted below have been found to comply with the requirements of the following Standards.

		Maximum Pigment		
		Loading(%wt)\$		
Tested Grade	Color	Organic	Inorganic	Thk (mm)_
ThermaSmart PRO	BK	1.0	-	6.0, 13.0

(\$) - Maximum pigment loading of the materials does not exceed 0.5% organic or 5.0% inorganic by weight unless otherwise indicated

No additional testing was deemed necessary in order to establish Canadian National Recognition. The following tests were considered representative of the same tests required by CAN/CSA-C22.2 No. 0.17. A CRD is not required in this category since all applicable requirements are performance based only.

GENERAL:

Test results relate only to the items tested.

The test methods and results stated below have been reviewed and found to be in accordance with the requirements within the Standards noted in the Summary.

METHOD:

UL746A - Polymeric Materials - Short Term Property Evaluations

- Infrared Spectroscopy (IR) Sec. 42
- Thermogravimetry (TGA) Sec. 45
- Differential Scanning Calorimetry (DSC) Sec. 46

		Reference Dates				
Grade	Material	IR	TGA	DSC		
ThermaSmart PRO	Polyethyle	T06-04-12	Т03-25-12	T07-28-12		
	ne					

Per clients request the material is recognized as Polyolefin.

UL 94 - Tests for Flammability of Plastics Materials for Parts in Devices and Appliances

Horizontal Burning Foamed Material Test; HBF, HF-1, or HF-2 - Sec. 12

UL746A - Polymeric Materials - Short Term Property Evaluations

Density Determination of Foamed Polymeric Materials - Sec. 41

File E321109 Page T1-2 of 2 Issued: 2012-06-15

Test Record Summary:

The results of this investigation indicate that the product(s) evaluated comply with the applicable requirements in

- the Standard for Tests for Flammability of Plastic Materials for Parts in Devices and Appliances, UL94, Fifth Edition, revised January 31, 2012
- the Standard for Polymeric Materials Short Term Property Evaluations,
 UL746A, Fifth Edition, revised October 25, 2011
- the Evaluation of Properties of Polymeric Materials, CAN/CSA-C22.2 No. 017-00, reaffirmed 2009

and therefore, such products are judged eligible to bear UL's Mark as described on the Conclusion Page of this Report.

Any information and documentation involving UL Mark services are provided on behalf of UL LLC or any authorized licensee of UL.

CONCLUSION

Samples of the component covered by this Report have been found to comply with the requirements covering the category and the components are found to comply with UL's applicable requirements. The description and test result in this Report are only applicable to the sample(s) investigated by UL and does not signify the product(s) described as being covered under UL's Follow-Up Service Program. When covered under UL's Follow-Up Service Program, the manufacturer is authorized to use the Recognized Marking on such products which comply with UL's Follow-Up Service Procedure and any other applicable requirements of UL LLC. The Recognized Component Mark of UL LLC on the product, or the Recognized Marking symbol on the product and the Recognized Component Mark on the smallest unit container in which the product is packaged, is the only method to identify products investigated by UL to published requirements and manufactured under UL's Recognition and Follow-Up Service.

This Report is intended solely for the use of UL and the Applicant for establishment of UL certification coverage of the product under UL's Follow-Up Service. Any use of the Report other than to indicate that the sample(s) of the product covered by the Report has been found to comply with UL's applicable requirements is not authorized and renders the Report null and void. UL shall not incur any obligation or liability for any loss, expense, or punitive damages, arising out of or in connection with the use or reliance upon the contents of this Report to anyone other than the Applicant as provided in the agreement between UL and Applicant. Any use or reference to UL's name or certification mark(s) by anyone other than the Applicant in accordance with the agreement is prohibited without the express written approval of UL. Any information and documentation involving UL Mark services are provided on behalf of UL LLC or any authorized licensee of UL.

REPORT BY:

REVIEWED BY:

Jerome EMAURY Project Engineer Wendy Stikvoort Senior Project Engineer