

The science behind the solutions.

Test report

	:	Segal project
Project number	:	RK2010012
Type of test	:	Adhesion
Date	:	10-Mar-10
Tested by	:	Ricardo Koens

Summary:

Mr. Smirnov has sent some aluminum samples (55514, 8603, 8606) of Segal to be tested with and without primer on adhesion with SSG4000E and SSG4400.

SSG4000E and SSG4400 on aluminum substrates; 8606 white coated and 8603 white coated need to be primed with SS4004P to get a perfect adhesion during all test conditions.

SSG4000E and SSG4400 on aluminum substrates; 8606 not coated and 55514 show perfect adhesion during all test conditions without a primer.

MOMENTIVE performance materials	Test report Project name Project number Type of test	:	Segal Project RK2010012 Adhesion	
The science behind the solutions.	Date	:	10-Mar-10	

Purpose of testing:

Mr. Smirnov has sent some aluminum samples (55514, 8603, 8606) of Segal to be tested with and without primer on adhesion with SSG4000E and SSG4400.

Substrate information:

Substrate	Туре	Cleaning product
Aluminum	8606 white coated	MEK
Aluminum	8606 not coated	MEK
Aluminum	8603 white coated	MEK
Aluminum	55514	MEK

Test(s):

Prepare peel adhesion samples with SSG4000E and SSG4400. They will be tested with and without primer SS4004P.

Test conditions:

Initial	:	14 days room temperature cure (23 \pm 2 °C, 50 \pm 5% RH)
Water immersion	:	14 days initial + 7 days H_2O
Oven 100 °C	:	14 days initial + 7 days H_2O + 7 days 100°C

Results:

Adhesion results on Aluminum substrates

Substrate Aluminum	Grade	Primer	Initial CF (%)	Water immersion CF (%)	Oven 100 °C CF (%)
8606 white coated	SSG4400	none	0	80	100
		SS4004P	100	100	100
	SSG4000E	none	0	100	100
		SS4004P	100	100	100
8606 not coated	SSG4400	none	100	100	100
		SS4004P	100	100	100
	SSG4000E	not primed	100	100	100
		SS4004P	100	100	100
8603 white coated	SSG4400	none	0	0	100
		SS4004P	100	100	100
	SSG4000E	none	50	50	50
		SS4004P	100	100	100
55514	SSG4400	none	100	100	100
		SS4004P	100	100	100
	SSG4000E	none	100	100	100
		SS4004P	100	100	100

Momentive and M-design logo are trademarks of Momentive Performance Materials Inc. Copyright 2008 Momentive Performance Materials, Inc. All rights reserved.

3/10/10 - EU-50-091-10

MOMENTIVE performance materials	Test report Project name Project number Type of test	:	Segal Project RK2010012 Adhesion	
The science behind the solutions.	Date	:	10-Mar-10	

Conclusion:

SSG4000E and SSG4400 on aluminum substrates; 8606 white coated and 8603 white coated need to be primed with SS4004P to get a perfect adhesion during all test conditions.

SSG4000E and SSG4400 on aluminum substrates; 8606 not coated and 55514 show perfect adhesion during all test conditions without a primer.

Approved by: R. Koens

Date: 10-Mar-10

Each user bears full responsibility for making its own determination as to the suitability of Suppliers' materials, services, recommendations, or advice for its own particular use. Each user must identify and perform all tests and analyses necessary to assure that its finished parts incorporating Suppliers' products, materials, or services will be safe and suitable for use under end-use conditions. Nothing in this or any other document, nor any oral recommendation or advice, shall be deemed to alter, vary, supersede, or waive any provision of Suppliers' Standard Conditions of Sale or this Disclaimer, unless any such modification is specifically agreed to in a writing signed by Suppliers. No statement contained herein concerning a possible or suggested use of any material, product, service or design is intended, or should be construed, to grant any license under any patent or other intellectual property right of Suppliers or any of its subsidiaries or affiliates covering such use or design, or as a recommendation for the use of such material, product, service or design in the infringement of any patent or other intellectual property right.

DISCLAIMER: THE MATERIALS, PRODUCTS AND SERVICES OF MOMENTIVE PERFORMANCE MATERIALS INC., MOMENTIVE PERFORMANCE MATERIALS ASIA PACIFIC PTE. LTD., MOMENTIVE PERFORMANCE MATERIALS MORLDWIDE INC., MOMENTIVE PERFORMANCE MATERIALS ASIA PACIFIC PTE. LTD., MOMENTIVE PERFORMANCE MATERIALS WORLDWIDE INC., MOMENTIVE PERFORMANCE MATERIALS DING BUSINESS IN LOCAL JURISDICTIONS (collectively "SUPPLIERS"), ARE SOLD BY THE RESPECTIVE LEGAL ENTITY OF THE SUPPLIER SUBJECT TO SUPPLIERS' STANDARD CONDITIONS OF SALE, WHICH ARE INCLUDED IN THE APPLICABLE DISTRIBUTOR OR OTHER SALES AGREEMENT, PRINTED ON THE BACK OF ORDER ACKNOWLEDGMENTS AND INVOICES, AND AVAILABLE UPON REQUEST. ALTHOUGH ANY INFORMATION, RECOMMENDATIONS, OR ADVICE CONTAINED HEREIN IS GIVEN IN GOOD FAITH, SUPPLIERS MAKE NO WARRANTY OR GUARANTEE, EXPRESS OR IMPLIED, (I) THAT THE RESULTS DESCRIBED HEREIN WILL BE OBTAINED UNDER END-USE CONDITIONS, OR (ii) AS TO THE EFFECTIVENESS OR SAFEFY OF ANY DESIGN INCORPORATING SUPPLIERS' PRODUCTS, MATERIALS, SERVICES, RECOMMENDATIONS OR ADVICE. AFOREMENTIONED EXCLUSIONS OR LIMITATION OF LIABILITY ARE NOT APPLICABLE TO THE EXTENT THAT THE END-USE CONDITIONS OR ADVICE. AFOREMENTIONED EXCLUSIONS OR LIMITATION OF LIABILITY ARE NOT APPLICABLE TO THE EXTENT THAT THE END-USE CONDITIONS CONDITIONS CORRESPOND TO THE RECOMMENDED CONDITIONS OF SALE, SUPPLIERS AND BY OF INCORPORATION AS DESCRIBED BY SUPPLIER IN ITS PRODUCT DATA SHEET AND/OR PRODUCT SPECIFICATIONS. EXCEPT AS PROVIDED IN SUPPLIERS' STANDARD CONDITIONS OF SALE, SUPPLIERS AND THEIR REPRESENTATIVES SHALL IN NO EVENT BE RESPONSIBLE FOR ANY LOSS RESULTING FROM ANY USE OF ITS MATERIALS, PRODUCTS OR SERVICES DESCRIBED HEREIN.