



Dow Chemical Canada Inc.
3546 Rear Street
Cambridge, Ontario N0N 1E0
Canada

FACSIMILE MESSAGE

Date: Jan 10/07

To: Phil Ryan

Fax #: 519-737-7102

From: CRAIG SUTMAN Dow Automotive

Total Number of Pages: 8 (including cover page)

Phil: your yearly Re-CERTIFICATION
for DNF 519.05.

CRAIG

IF TOTAL MESSAGE IS NOT RECEIVED,
PLEASE 519-869-6649
FACSIMILE NUMBER - 519-869-8048

DaimlerChrysler



Part Submission Warrant

Part Name DNE 518.05 with PAPI 4004 (Speclex NS-1540) Cust. Part Number N/A
 Shown on Drawing No. N/A Org. Part Number N/A
 Engineering Change Level N/A Dated _____
 Additional Engineering Changes N/A Date _____
 Safety and/or Government Regulation Yes No Purchase Order No. _____ Weight (kg) 0.51841 kg
 Checking Aid No. N/A Checking Aid Engineering Change Level N/A Dated 08-Jan-07

ORGANIZATION MANUFACTURING INFORMATION

CUSTOMER SUBMITTAL INFORMATION

Dow Chemical
 Organization Name & Supplier/Vendor Code Renoval Farnell
 505 Hoover St.
 Street Address
 Farnell Mich 48822 USA
 City Region Postal Code Country
 Buyer/Supplier Code
 HIR/AR Application
 Application

MATERIALS REPORTING

Has customer-required Substances of Concern information been reported? Yes No N/A
 Submitted by MDS or other customer format: N/A

Are polymeric parts identified with appropriate ISO marking codes? Yes No N/A
 REASON FOR SUBMISSION (Check at least one)
 Initial Submission Change to Optional Construction or Material
 Engineering Change(s) Supplier or Material Source Change
 Tooling: Transfer, Replacement, Refurbishment, or Additional Change in Part Processing
 Correction of Discrepancy Parts Produced at Additional Location
 Tooling Inactive > than 1 year Other - please specify below
 Yearly Re-certification

REQUESTED SUBMISSION LEVEL (Check one)

- Level 1 - Warrant only (and for designated appearance items, an Appearance Approval Report) submitted to customer.
- Level 2 - Warrant with product samples and limited supporting data submitted to customer.
- Level 3 - Warrant with product samples and complete supporting data submitted to customer.
- Level 4 - Warrant and other requirements as defined by customer.
- Level 5 - Warrant with product samples and complete supporting data reviewed at organization's manufacturing location.

SUBMISSION RESULTS

The results for dimensional measurements material and functional tests appearance criteria statistical process package
 These results meet all drawing and specification requirements: Yes No (If "NO", Explanation Required)
 GM03094 Recovery: 30% max. Dow 45%
 GM03304 Elongation 100% min. Dow - 85%

Mold / Cavity / Production Process N/A

DECLARATION

I hereby affirm that the samples represented by this warrant are representative of our parts which were made by a process that meets all Production Part Approval Process Manual 4th Edition Requirements. I further affirm that these samples were produced at the production rate of _____ / _____ hours.
 I also certify that documented evidence of such compliance is on file and available for review. I have noted any deviations from the declaration below.
 EXPLANATION/COMMENTS:

Is each Customer Tool properly tagged and numbered? Yes No N/A
 Organization Authorized Signature *John W. Smith* Date 08-Jan-07
 Part Name Cigre W. Substn. Phone No. (519) 889-8649 Fax No. (519) 889-8048

Title Technical Service Engineer E-mail csutton@dow.com

Part Warrant Depositor: Approved Rejected Other

FOR CUSTOMER USE ONLY (IF APPLICABLE)

Customer Signature _____ Date _____

Print Name _____ Customer Tracking Number (optional) _____

March 2003 **CFG-1001**

Production Part Approval - Material Test Results

DaimlerChrysler Ford General Motors
SUPPLIER Dow Automotive

PART NUMBER ONF 519 05

NAME OF LABORATORY Dow Automotive (Sarnia Ontario)

PART NAME

Formulated Polyol PAPI 4064 MDI (Specification NS 1540)

ACT Labs (Hillsdale Mich.) ARDL Labs (Akron Ohio)

Test results for GM#29294 Class D / Rev / Sept. 2005 Molded Polyurethane Foam For Trim Items.

ALL ASTM D 2406 and D 1564 methods are superseded by ASTM D 3574

TYPE OF TEST	MATERIAL SPEC. NO./DATE/SPECIFICATION	SUPPLIER TEST RESULTS	OK	NOT OK
3.2	Core Density ASTM D3574A 24 kg/m ³ min.	P 50.7	X	
"	Sag Factor- Molded ASTM D3574 B1 2.4 min.			
"	(IFD @ 65% def.) / (IFD @ 25% def.)	1X 3	X	
"	Sag Factor- Slab			
"	% Recovery ASTM D3574 B1 30% max.			
"	1-(IFD @ 25% def.) / (IFD @ 25% R def.) X 100	1X 45		X
"	Tensile Strength ASTM D 3574E 82 kpa. Min.			
"	Jaw separation speed is 900 +/-10 mm/min.	P 231	X	
"	Tensile DHA ASTM D3574K 25% change max.	P 22 (181)	X	
"	Tear Strength ASTM D3574F 180N/m min.			
"	Rate of travel is 50 +/-5 mm/min.	P 262	X	
"	Elongation ASTM D3574E 100% min.			
"	Rate of travel is 500 +/-10mm/min.	P 88		X
"	Compression set (50%) ASTM D3574D 25% max.			
"	Molded sample shall have skin removed when tested. The reported value is a percentage of the original value Cp.	P 18.5	X	
"	Compression set (75%) ASTM D3574D 20% max.			
"	Molded sample shall have skin removed when tested. The reported value is a percentage of the original value Cp.	P 19.1	X	
"	Compression set (50% HA) ASTM D3574D.J 30% max. chng %	P 25 (24.6)	X	
"	Molded sample shall have skin removed when tested. The reported value is a percentage of the original value Cp.			
"	CFD (50% HA) ASTM C3574 C.J 30% change max.	P 6	X	
"	Fogging (at 85C) GM 9305P 60 min.	P 100	X	
"	Staining ASTM D925 A,B	P PASS	X	
	The foam pads must not contain any			
	attractable or fluffing chemicals which			
	can cause migration or contact effect			
"	on the trim materials with which they are used			
"	Odour SAE J1351 odour scale 3 max.	P PASS 1.5	X	
"	Flammability (GM9070P) 63.5 mm/min.	P 60	X	
	Note * These results are foam without the trim.			

Mark W. Smith
2/10/07

Production Part Approval - Material Test Results

DaimlerChrysler Ford General Motors		PART NUMBER DNF 519.05	
SUPPLIER Dow Automotive		PART NAME Formulated Polyol, PAPI 4084 HDO (Specifex NS 1540)	
NAME OF LABORATORY Dow Automotive (Samia Ontario)			
ACT Labs (Hillsdale Mich.) ARDL Labs (Akron Ohio)			
Test results for GM6293M Class D / Rev 1 Sept 2005 Moulded Polyurethane Foam For Trim Items.			
All ASTM D 2408 and D 1344 methods are superseded by ASTM D 3574			
TYPE OF TEST	MATERIAL SPEC. NO./DATE/SPECIFICATION	SUPPLIER TEST RESULTS	NOT OK

	TITLE	DATE
	TD&D	01/08/2007

Production Part Approval - Material Test Results

DaimlerChrysler Ford General Motors
SUPPLIER Dow Automotive

PART NUMBER ONF 579 05

NAME OF LABORATORY Dow Automotive (Salina, Ontario)
ACT Labs (Hillsdale Mich.), ARDL Labs (Akron Ohio)

PART NAME Formulated Polyol, PA141094 (Speciflex NS-1540) MDI

Test results for GM90644 / Rev / June, 2005 Molded Polyurethane Foam for Trim Items. Tests conducted Month-Day-Year

All ASTM D 2409 and D 1584 methods are superseded by ASTM D 3574

P = Part 1X = 1X Pad

TYPE OF TEST	MATERIAL SPEC. NO./DATE/SPECIFICATION	SUPPLIER TEST RESULTS	OK	NOT OK
3.2	Density (ASTM D3974, Test A): shell not deviate more than +/- 5% (typical)	53	X	
3.3	Tensile Strength			
	a. As received (ASTM D3574, Test E): 83 kPa minimum	225	X	
	b. Dry heat aged (ASTM D3574, Test K): 82 kPa minimum	158	X	
3.4	Elongation (ASTM D3574, Test E)	83	X	
	a. 50% minimum			
	b. 150% minimum for hand trimmed, nonmolded in shape parts			
3.5	Tear Strength (ASTM D3574, Test F)	205	X	
	a. 130 N/m minimum			
	b. 200 N/m minimum for hand trimmed, nonmolded in shape parts			
3.6	Constant Deflection Compression Set (ASTM D3574, Test D, 50%)	17	X	
	a. 40% maximum	17	X	
	b. 25% maximum for armrests	17	X	
	c. 60% maximum for seatbacks	17	X	
	Constant Deflection Compression Set (ASTM D3574, Test D, J2 50%)			
	a. 40% maximum	15	X	
	b. 25% maximum	15	X	
	c. 80% maximum for seatbacks	15	X	
3.7	Compression Force Deflection (ASTM D3574, Test C, J2 humid aged 50%, 50 mm/min rate): % loss 50% maximum	33	X	
3.8	Odor (SAE J1351): no offensive odor; rating of two	1X PASS 1.5	X	
3.9	Flammability (GM9070P): 101.8 mm per multiple maximum	60	X	
3.10	Compatibility (GM9141P): must not adversely affect or stain adjacent or contacting materials when tested	1X PASS	X	
3.11	Hardness	N.A. Tests completed on parts		
3.12	Fogging (9305P, Type A): maximum rating of 60. No oily residue (Type II) is permissible	1X 99.9	X	

Alan W. Smith
01/08/07

Production Part Approval - Material Test Results

DaimlerChrysler Ford General Motors
SUPPLIER Dow Automotive

PART NUMBER DNF 519 05

NAME OF LABORATORY Dow Automotive (Sarnia, Ontario)

PART NAME Formulated Polyol, PAPI 4004 (Specdex NS 1540) MDI

ACT Labs (Milliscale Mich), ARDL Labs (Akron Ohio)

Test results for Ford WSB-M2D402 A31 Rev 1 June, 2005 Molded Polyurethane Foam for Seat Cushions and Backs.

All ASTM D 2426 and D 1984 methods are superseded by ASTM D 3574.

P = Pass 1X = 1X Pad

TYPE OF TEST	MATERIAL SPEC. NO./DATE/SPECIFICATION	SUPPLIER TEST RESULTS	OK	NOT OK
3.5	Density kg/m ³ (ASTM D 3574 A): 50mmX50mmX25mm specimen. As specified on engineering drawing.	P	58	X
3.6.1	Tensile Strength ASTM D 3574, Test E, min. 83 kPa	P	243	X
3.6.2	Heat aged Tensile Strength ASTM D3574, Test K min. 75% of original.	P	77% (188kPa)	X
3.6.3	Forgation, min. 80%	P	81	X
3.6.4	Tear Resistance (ASTM D1004), 140 N/m min.	P	299	X
3.6.5	Compression set, normal, max (75% deflection FLTM BN 118-07) cushions-10%, backs-20%, cl	P	10	X
3.6.6	Compression set, autoclave aged, max (75% deflection FLTM BN 115-07) cushions-15%, backs-25%, cl	P	14	X
3.6.7.1	Indentation Force Deflection (ASTM D 3574, Test B1, 50% deflection Sag factor (ratio of 65%/25% deflection) 2.5% min.	1X	2.8	X
3.6.7.2	Indentation Force Deflection (ASTM D 3574, Test B1, 50% deflection Recovery (ratio of 25%return/25%original deflection) 40% max.	1X	35	X
3.6.8	Stretching (SAE J1885) The control sample and the test sample should have the same visual appearance after exposure.	1X	AATCC 4-5 PASS	X
3.6.9	Fogging (FLTM BO 116-03) Fog no. should be "0"	1X	PASS ("0" fogging)	X
3.6.10	Odor (FLTM BO 131-01 / SAE J1351) Rating 2 max.	1X	1.5	X
3.6.11	Load Indentation Test areas (bolsters and inserts).		N.A. must be done on bolsters and inserts only	
3.6.12	Aged Load Loss (ASTM D 3574 Test B1, 65% defl. avg. of five parts required of seat cushions only) 35% max.		N.A. Required of actual seat cushion only.	
3.6.13	Aged Flexibility (specimen size 50X150X25mm. Autoclave aged for 5 hours at 120C followed by 1 hour drying at 104C then bent 180 degrees around a 6mm diameter mandrel. No splitting or crumbling.	1X	Pass	X
3.6.14	Fatigue Resistance, max. height loss @222N-14% (20,000 cycles roller shear) FLTM BO 112-04 Seat cushions - 267N shear load roller assembly. Seat backs - 133N load roller assembly. Excessive surface deterioration after 20,000 cycles shall be cause for rejection.	1X	0.6	X

[Handwritten Signature]
2/10/07

