



MATERIALS APPROVALS INDEX

May 29, 2003

**Wellman, Inc.
Engineering Resins Division
P. O. Drawer 188
Johnsonville, SC 29555
1-800-821-6022**

SPECIFICATION NUMBER

100-610
100-758
100-759
100-1051

51-8111-0984

1762-6201
M-1180
M-1199

NOTES
AMP**BABCOCK****BURROUGHS****DAIMLER CHRYSLER**
COPORATION

MS-DB 41 CPN 1076
MS-DB 41 CPN 1826
MS-DB 41 CPN 1899
MS-DB 41 CPN 1900
MS-DB 41 CPN 1938
MS-DB 41 CPN 1948
MS-DB 41 CPN 2043
MS-DB 41 CPN 2055
MS-DB 41 CPN 2228
MS-DB 41 CPN 2239
MS-DB 41 CPN 2605
MS-DB 41 CPN 2727
MS-DB 41 CPN 2755
MS-DB 41 CPN 2755
MS-DB 41 CPN 2927
MS-DB 41 CPN 2927 (DX-9 Color)
MS-DB 41 CPN 2927
MS-DB 41 CPN 3069
MS-DB 41 CPN 3134
MS-DB 41 CPN 3319
MS-DB 41 CPN 3326
MS-DB 41 CPN 3546
MS-DB 41 CPN 3547
MS-DB 41 CPN 3547 (DX-9 Color)
MS-DB 41 CPN 3595
MS-DB 41 CPN 3596
MS-DB 41 CPN 3659
MS-DB 41 CPN 3738
MS-DB 41 CPN 3795
MS-DB 41 CPN 3795 (DX-9 Color)
MS-DB 41 CPN 3802
MS-DB 41 CPN 3803
MS-DB 41 CPN 3870
MS-DB 41 CPN 3918
MS-DB 41 CPN 3918
MS-DB 41 CPN 3918
MS-DB 41 CPN 3958
MS-DB 41 CPN 3967
MS-DB 41 CPN 3985
MS-DB 41 CPN 4129
MS-DB 41 CPN 4210
MS-DB 41 CPN 4347
MS-DB 41 CPN 4347 (DX-9 Color)
MS-DB 41 CPN 4384
MS-DB 41 CPN 4384 (DX-9 Color)
MS-DB 451 CPN 3255
MS-DB 454 CPN 3425

(old CPN3667)

(old CPN3815)
(old CPN3246)

(old CPN3787)
(old MS-DB427 CPN2055)
(old CPN3255)

(old MS-DB451 CPN2605)
(old CPN4019)

(old MS-DB444 CPN2927)

(old MS-DB451 CPN3069)
(old MS-DB451 CPN3134)
(old MS-DB451 CPN3319)
(old CPN3736)
(old MS-DB451 CPN3546)
(old MS-DB444 CPN3547)

(old MS-DB447 CPN3595)
(old MS-DB447 CPN3596)
(old MS-DB430 CPN3659)

(PET)

WELLMAN PRODUCT NUMBER

FR22F-N
FRGS25-66-N
GSF25/15-66
GF13-66 22LH-N

GF33A099 HRBK

220-N
FR22F-N
GS40-66 22L-N
GS25-66 22L-N

22LH-N
22LH16 XE-NBK1
NY1599 BK
GF33-66 XE-NBK1
22L-N
22L-NBK1
GF33-66 XE-N
22LH14 XE-N
MR410 22H-NBK1
GF13-66 XE-NBK1
MR409 22H-NBK1
GF33A099HR-BK
MRGF25/15 42H-
MRGF25/15 42H-BKDX-9 (Interior)
MRGF25/15 42H-NBK1
MRGF1683-WBK1 (Interior)
MRGF1616-BK
MR409 22H-NBK4
MRGF25/15 22H-NBK1
MR409 22H-N
MRGF25/15 42H-WBK (Exterior)
WE1349 BK1
GF20-60 XE-NBK1
GF1685-WBK1 (Interior)
GF43-66/6 XE-N
GF43-66/6 XE-NBK1
WE1408 BK
MRGF25/15 22H-N
GS25-66 22LH-NBK1
GS1684-WBK1 (Interior)
GSF25/15-66 22L-NBK1
GSF25/15-66 22L-N
42LH-WBK (Interior)
MR410 22H-N
MR410 22H-GY1
MRB40K004 WT1
GF33-66/6 XE-WBK (Exterior)
FRGF25-66-NBK3
MRGF3822 BK
EcoLon 2000-BK1
MRGF1619-BK3
GF33-66 XE-
GF33-66 XE-BKDX-9
GF20-60 XE-
GF20-60 XE-BKDX-9
MR410 22H-NBK1
WELLPET® MRGF102R-BK1

FORD MOTOR COMPANY

ESF M4D 78A	Replaced by SAE J1639 PA0222	42L-XE-N
ESB M4D 89A	Replaced by WSK-M4D663-A	GF33-66 XE-N1
ESF M4D 101-A		42LH-XE-N & NBK1
ESB M4D 133A		GF33-66 XE-N1
ESF M4D 150A		22L-N
ESB M4D 178-A	Replaced by SAE J1639 PA0171	22LHI6-XE-N
TYPE II		22LHI6-XE-NBK1
ESB M4D 189-A		GFT13-66 XE-N
		GFT13-66 XE-NBK1
ESB M4D 264-A	Replaced by SAE J1639 PA0171	22LHI6-XE-N
	Replaced by SAE J1639 PA0171	22LHI6-XE-NBK1
ESA M4D 267-A		22LHI6-XE-N
		22LHI6-XE-NBK1
ESE M4D 287-A		GF33-66 XE-N
ESE M4D 287-B		GF33-66 XE-N
ESH M4D 287-C	Replaced by SAE J1639 PA1166	(See PA1166)
ESF M4D 314-A	Replaced by SAE J1639 PA0222	42LH-NBK1
ESB M4D 314-B	Replaced by SAE J1639PA0121 (or PA0222)	21LH-N
ESF M4D 335-A		GF43-66 XE-N, -NBK1
ESE M4D 341-A1	PET	GF1030
ESE M4D 341-A1	PBT	9330GR N
ESA M4D 349-A	Replaced by SAE J1639 PA1112	GF13-66 XE-N
ESA M4D 349-B		GFT13-66 XE-NBK1
ESB M4D 353-A2		MR410 22H-N
ESB M4D 353-A3		MRGF25/15 42H-NBK1
ESB M4D 353-A7	Specification Obsolete, White	MRGF25/15 42H-N
ESB M4D 353-A7	Replaced by SAE J1639 PA1147	MRB40K004-WT1
ESB M4D 354-A1	Replaced by SAE J1639 PA1147	MRGF25/15 22H-N
ESA M4D 359-A1	PBT	MRGF25/15 22H-NBK1
	PBT	9330GR N
		9000GP
ESB M4D 366-A1		GS40-60 42L-NBK1
		GS40-60 42LH-N
ESB M4D 366-A2		GSF25/15 22L-N
		GSF25/15 22L-NBK1
ESA M4D 429-A3		MR340 42H-N, -NBK1
ESL M4D 533-A		GF33-66/6 XE
WSS M4D 628-A2		FRGS25-66-NBK3
WSK M4D 642-A		GF1398 BK12
WSH M4D 669-A2		GF13-66 22LH-NBK1
WSK M4D 706-A2		XT1668-BK1
WSK M4D 719-A		MRGF3820 N
		MRGF3820 BK
		MRGF3822 BK
WSS M4D 719-A2	EcoLon	MRGF1518 BK, -BK3
WSS M4D 719-A2	EcoLon	2000-BK1
WSK M4D 822-A		MRGF25/15 42H-N,-NBK1
		MRGFX 1393-N
WSK M4D 822-A4	EcoLon	MRGF1616-BK

WSK M4D 823-A		MRGF25/15 22H-N
WSS M4D 951-A2	EcoLon	MRGF25/15 22H-NBK1
WSS M4D 986-A		MRGF1619 BK3, -BK5
SAE J1639 PA0121	JA6A Black	GF1768-BK1
SAE J1639 PA0121		GF1768-BKJA6A
SAE J1639 PA0121Z6		NY1599 BK
SAE J1639 PA0171		21LH-N, NBK4
SAE J1639 PA0222	See Note: 1	NY1599-BK
SAE J1639 PA0222Z6		22L-N, NBK1
SAE J1639 PA1112		22LH16 XE-N, NBK1
SAE J1639 PA1116		XT1561-BK
SAE J1639 PA1122		42LH XE-N, NBK1
SAE J1639 PA1137		42LH-N, NBK1
		42L XE-N, NBK1
		GF13-66 XE-N, NBK1
		GF13-66 22LH-NBK1
		GF33-66 XE-N, NBK1
		GFT13-66 XE-N, NBK1
		MR409 22H-N, NBK1, NBK3
		MR410 22H-N, GY1
SAE J1639PA1137 Z1Z2Z3	See Note: 1	Ecolon MR1660-BK

Z1: Fogging SAE J1756, 3 hours @ 100 C and 1 hour post conditioning at 23 C. No beads or crystals allowed. Min. reading of 70.

Z2: Contains at least 25% post consumer recycled content.

Z3: Odor, SAE J1351 rating 2 max.

SAE J1639 PA1166		GF33AO99 HRBK
SAE J1639 PA1247	See Note: 1	MRGF1616-BK
SAE J1639 PA1816		GF33-66/6 XE-NBK1
		GF33-66/6 XE-WBK

ASTM Callouts

D4000 PA120R37A32170		MRGF25/15 22H-NBK1
D4000 PA226R40A42270		MRGF25/15 42H-NBK1
D4000 PA120G33A53480		GF33-66 22LH-
		GF33-66 XE-
D400PA0120M25GA132KB070PA050U	See Note: 1	MR259 22LH-N
A36.0		

GENERAL ELECTRIC

A17B4A5		22L-N
A17B28A1		GS25-66 22L-N
A17B28A2		GS25-66 22L-NBK1
A17B28B1		GS40-66 22L-N
A17B28B2		GS40-66 22L-NBK1
A17B28C1		GSF25/15-66 22L-N
A17B28C2		GSF25/15-66 22L-NBK1

GENERAL MOTORS **CORPORATION**

GMP.PA66.002		GFT15N050-N2, -BK2
GMP.PA66.003		MRGF25/15 22H-N, -NBK1
GMP.PA66.003	White	MRGF1351-WT01
GMP.PA66.005		22L-N
		22L-NBK1
GMP.PA66.007		MR409 22H-N, -NBK1
		MR409 22H-NBK3
GMP.PA66.011		WE1304 N
GMP.PA66.011		WE1304 BK1

GMP.PA66.012		SGCO13 NBK1
GMP.PA66.013		GF33-66 XE-N, -NBK1
GMP.PA66.015		22LHI6 XE-N, -NBK1
GMP.PA66.016		GFT33N051-N
GMP.PA66.017		GFX1624-BK(PTFE)
GMP.PA66.018		22LH-N
		22LH-NBK4
GMP.PA66.020		GF13-66 XE-N, -NBK1
GMP.PA66.038R BB		XT1561 BK
GMP.PA66.042R		EcoLon 2000-BK1
GMP.PA66.049R		SGC013-BK1
GMP.PA66.054		GF33A099 HR N, -NBK1
GMP.PA66.057		GFT13-66 XE-N, -NBK1, -WT1
GMP.PA66.058		FRGF25-66-N, -NBK3
GMP.PA66.060		MR410 22L-N5, -NBK5
GMP.PA66.069		MR410 22H-N, -NBK1
	Gray	MR410 22H-GY1
	White	MRB40K004 WT1
GMP.PA66.070		GSF25/15-66 22L-N, -NBK1
GMP.PA66.074		XT1627-WBK2
GMP.PA66.075		GS40-66 22L-N, -NBK1
GMP.PA66/6.002		GF33-66/6 XE-N, -NBK1
GMP.PA66/6.003		GF43-66/6 XE-N, -NBK1
GMP.PA66/6.004		GF33-66/6 XE-WBK (Exterior)
GMP.PA66/6.004	167A Ebony	GF33-66/6 XE-BK167A
GMP PA66/6.008		GFT33N051-N2, NBK2
GMP PA6.001		MRGF25/15 42H-N1/WE1705
	167A Ebony	MRGF25/15 42H-BK167A (Interior)
	848 Black	MRGF25/15 42H-BK848 (Interior)
GMP PA6.006		GF14-60 XE-N, -NBK1
GMP PA6.008		42LH XE-N, -NBK1
GMP PA6.009		GF30-60 XE-N, -NBK1
GMP PA6.011 BB		MR410 42H-N, -NBK1
GMP PA6.012		MRGF25/15 42H-N, -NBK1
GMP PA6.013		MRGF25/15 42H-WBK (Exterior)
GMP PA6.014		GS40-60 42L-N, -NBK1
GMP PA6.025		MR340 42H-NBK1, -N
GMP PA6.030		MR409 42H-NBK3
GMP PA6.033		42L-XE-N, -NBK1
GMP PA6.034		GFT1700-N1
GMP PA6.035		MRGF30/10 42H-N, -NBK1
GMP PA6.042		GFX1356 BK01
GMP PA6.046 R		MRGF25/15 42H-NR, -NBK1R
GMP PA6.047R		42LH-N, -NBK1
<u>INTEGRAL HINGES</u>		
GM 7001M	GLASS GUIDES	22LHI3 XE-NBK1
PA66(A5,A22,A42,A43,A64,DC1100,FX		
X,G20,K620,L400,M228,R90,SA1190,Z)		
FXX=Melting Point by		
DSC at 10C/min of 255-265C		
Z= Copper Heat Stabilizer of 65 PPM min.		
GM 7001M	BULB SOCKETS FOR GUIDE	XT1486-N; -BK
PA66(A5,A22,A42,A64,DC1110,		
G20,K550,MB180,R100,U5,VE90,Z)		
Z=MULTIAXIAL IMPACT OF 40J		
MINIMUM AT MAXIMUM LOAD @		
6.6 M/SEC, 30 OF 30 DUCTILE AT 23C		

BUICK MOTOR DIVISION

CHEVROLET MOTOR DIVISION

CMP NY001 AB,BB,CB,DB	can be certified	22L-N
CMP NY005 AB,BB,CB,DB	can be certified	22LH XE-N
CMP NY010 AA	can be certified	GF43-66 XE-N
CMP NY019 AA	can be certified	GF13-66 XE-N
CMP NY019 AA	Contact Technical Service	GF13-66 22LH-N
CMP NY020 AA	can be certified	GF13-66 XE-NBK1
		GF13-66 22LH-NBK1
CMP NY021 AA	can be certified	GF13-66 XE-N
	can be certified	GF13-66 22LH-N
CMP NY022 AA,BB,CA,DA	can be certified	GF33-66 XE-N1
	can be certified	GF33-66 XE-N
	can be certified	GF33-66 22LH-N
CMP NY023 AB	can be certified	GF33-66 XE-N1
	can be certified	GF33-66 XE-N
CMP NY024 AA,BA,CA,DA	can be certified	GF33-66 XE-N
	can be certified	GF33-66 22LH-N
CMP NY025 AA	can be certified	GF33-66 XE-NBK1
	can be certified	GF33-66 22LH-NBK1
CMP NY026 AA		GFT13-66 XE-N
		GFT13-66 XE-NBK1
CMP NY028 AA		GFT33N051
CMP NY029 AA		GFT33N051
CMP NY033 AA,CA		MRB40K004 WT1
CMP NY033 AA		MR410 22H-N
CMP NY033 BA		MR410 22H-NBK1
CMP NY035 AA	can be certified	GF33-66 XE-N1
	can be certified	GF33-66 NE-N
	can be certified	GF33-66 22LH-N
CMP NY138 AA		MRB40K004 WT1
CMP NY050 AB,BB,CB,DB	Contact Technical Service	42L-XE-N
CMP NY051 AB,BB,CB,DB	Contact Technical Service	42L-XE-NBK1
CMP NY052 AA	can be certified	42LH-XE-N
CMP NY053 AA	can be certified	42LH-XE-NBK1
CMP NY055 AA	Contact Technical Service	42L-XE-N, -NBK1
CMP NY056 AA		22L-XE-N1
CMP NY056 AA	Contact Technical Service	22L-N
		22L-NBK1
CMP NY057 AA		22LH-XE-N
CMP NY058 AA	Contact Technical Service	42LH-XE-N
		42LH -XE-NBK1
CMP NY065 AA	can be certified	GF43-66 XE-N, -NBK1
	can be certified	GF43-66/6 XE-N, -NBK1
CMP NY073 AA		MR329 22H-N
CMP NY074 AA	can be certified	GF13-66 22LH-N, -NBK1
	can be certified	GF13-66 XE-N, -NBK1
	can be certified	GF14-60 XE-N, -NBK1
CMP NY076 AA		22LH16 XE-N
CMP NY078 AA	can be certified	GF30-60 XE-N, -NBK1
CMP NY084 AA	can be certified	GF33-66 XE-N1
	can be certified	GF33-66 22LH-N, -NBK1
	can be certified	GF33-66 XE-N, -NBK1
	can be certified	GF33-66/6 XE-N, -NBK1

CMP NY085 AA	can be certified can be certified can be certified can be certified	GF30-60 XE-N, -NBK1 GF33-66 XE-N, -NBK1 GF33-66/6 XE-N, -NBK1 GF30-60 XE-N, -NBK1 GF33-66 XE-N, NBK1 MR409 22H-N, NBK1 MR409 22H-NBK3 MRGF25/15 42H-N, NBK1 GF13-66 XE-N, NBK1 22LH XE-N GFT13-66 XE-N, NBK1 GSF25/15-66 22L-N, -NBK1 MRGF25/15 22H-N MRGF25/15 22H-NBK1
CMP NY087 AA CMP NY094 AA CMP NY094 AA,BA,CA CMP NY095 AB CMP NY097 AA CMP NY102 AB,BB,CB,DB CMP NY104 AA CMP NY108 AA CMP NY111 AA	can be certified Contact Technical Service	
CMP NY119 AA CMP NY131 AA CMP NY132 AA		MR410 42H-NBK1 or Nat. WE1304 BK1 or Nat. MR410 42H-N MR410 42H-NBK1
CMP NY133 AA		MR340 42H-N MR340 42H-NBK1 MR410 22H-N MR410 22H-NBK1 MR410 22H-GY1 MRB40K004 WT1
CMP NY138 AA		

DELPHI CHASSIS SYSTEMS

M-2964 MX-856	MRGF30/10 42H-N GS40-66 22L-N, -NBK1
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DELPHI ENERGY AND ENGINE MANAGEMENT SYSTEMS

M-4028 M-4101 M-6029 M-6074	GS40-66 22L-NBK1 FRGF25-66-N FRGF25-66 NBK3 GF33-66 XE-NBK1
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DELPHI INTERIOR SYSTEMS

DX300103 DX300137 DX300140 DX300141 DX300179 DX300180 DX300182 DX300183 DX300184 DX300185 DX300186 DX300187 DX300188 DX300194 DX300195 DX300196 DX300197 DX300198 DX300199 DX300200 DX300293 DX300317 DX300376 DX300382	GF43-66/6XE-N, -NBK1 GF33-66/6 XE-WBK 42LH-N, -NBK1 MRGF25/15 42H-N1/WE1705 GF13-66 XE-N, -NBK1 22LH16 XE-N, -NBK1 MR409 22H-N, -NBK1, -NBK3 22L-N, -NBK1 MRGF30/10 42H-N, -NBK1 MRGF25/15 42H-N, -NBK1 42L XE-N, -NBK1 MR410 22H-N, -NBK1, -GY1 GFT13-66 XE-N, -NBK1 GFT15N050-N2, -BK2 MR410 42H-N, -NBK1 42LH XE-N, -NBK1 GF14-60 XE-N, -NBK1 GF30-60 XE-N, -NBK1 MR410 22L-N5, -NBK5, -GY5 SGC013-NBK1 GF33-66 XE-N, -NBK1 XT1627-WBK2 MRGF25/15 42H-WBK MRGF25/15 22H-N; -NBK1
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GUIDE CORPORATION

PMS NY1 (MG2567)
PMS NY3
PMS NY5 (MG2361)
PMS NY5 (MG2435)
PMS NY15 (MG2750)
PMS NY15 (MG2992)

22LH-NBK4
GF13-60 42LH-N
MRGF30/10 42H-N
MRGF30/10 42H-NBK1
MR410 22H-NBK1
MR410 22H-GY1

DELPHI THERMAL SYSTEMS

6-9-40-256
SD2-214 para. 4.1
SD2-214 para. 4.7

MR410 22H-N
MR410 22H-N
MR410 42H-NBK1

DELPHI AUTOMOTIVE SYSTEMS

M2205-001

21U-NBK1

SAGINAW STEERING GEAR DIVISION

7828532

MRGF30/10 42H-N, -NBK1

XEROX

29-0115
29-0182
M-1180
M-1199

GSF25/15 22L-NBK1
GS40-66 22L-N
FR22F-N
GS40-66 22L-N
GS25-66 22L-N

The above customer specifications and approvals are subject to change without notice. Please contact your Wellman representative for assurance of specification compliance.

ASTM SPECIFICATIONS

ASTM D4000/D4066

Typical callouts for some
Wellamid materials

PA0111
PA 0115
PA0121
PA0131

220, 22L
21L
22LH
22LN2

PA0171

PA0212
PA0222
PA0232

PA0110,B45150,F34
PA0110,G25,A21140,F24
PA0110,G25,A32280,F34
PA0110,G25,A21120
PA0110,G40,A22140

PA0120,G40,A22180

PA0120,G13,A32280
PA012G25
PA0120,G33,A53480
PA0120,G33,A53480
PA0120,G43,A54580
PA0120,M25,A21220
PA0120,M40,A22240
PA0120,M40,A22160
PA0120,R40,A33270
PA0170,G13,A21470

PA0210,G40,A22120
PA0220,G33,A43470
PA0220,M34,A22230
PA0220,M40,A22160
PA0220,R40,A33170
PA0220,R40,A32270

22LHI4

420-XE, 42L-XE
42LH-XE
42LN2-XE

FR22F
FRGS25-66
FRGF25-66
GS25-66 22L
GS40-66 22L

GSF25/15 22LH

GF13-66 XE
GF25-66 XE-NBK1
GF33-66 XE
GF33-66 22LH
GF43-66 XE
MR259 22LH
MR409 22H
MR410 22H
MRGF25/15 22H
GFT13-66 XE

GS40-60 42L
GF30-60 XE
MR340 42H
MR410 42H
MRGF25/15 42H
MRGF30/10 42H