承 認 書
Approval Sheet

PAO No : PAO-0903113
Page : 1 of 1
Date : 09 / 07 / 2009

Part No : 6172019CMW	REV: 0	Where use: AP102RR	
Maker : Master Wave Technology Co., Ltd		Maker P/N : 98241MRSX005-270	REV: 00
Part Name : ANTENNA		Vendor : Master Wave	Place/Origin : CHINA
Part Description : ANTENNA 98241MRSX005-270, 108mm/50Ohm/2dBi BLACK SMA MWT, Exem			

Contents or Instructions :

Detailed specification is shown as attachment.

中磊電子股份有限公司
Sep. 07 2009
文件管制中心發行章

* 任何變更須事前經協調並承認後始可變更.Any change must be negotiated in advance, and execute the revision after SerComm's Approval.

Disposition	Countersign		In Charge (Name/Date)	Checked By (Name/Date)
Final Approval :	V	Component	May Hsu 09/07/2009	PS Yang 09/07/2009
■electrical ■ dimensional ■ visual ■ function				
Conditional Approval :		PM		
☐ electrical ☐ dimensional ☐ visual ☐ function	V	EMI	Ronnie Cheng 09/07/2009	Ronnie Cheng 09/07/2009
Temporary Approval :				
☐ electrical ☐ dimensional ☐ visual ☐ function	V	H/W EE	Jeff Chang 09/07/2009	Kevin_cw Tseng 09/07/2009
Attachments :		Mechanical		
☐ sample ■ specification ☐ drawing ☐ other		PE		

Final disposition :

■ Approved

☐ Conditional Approved :

For purchasing to by _____pcs, for pilot poduction test.

☐ Temporary approved :

Vendor is requested to supply samples again before _____ (mm)/_____ (dd)/_____ (yy)

Change history (變 更 記 錄)

REV	Related Document (相關文件	FILE No. (編 號)

DISTRIBUTION : ■CHUNAN ■ SERNET ■VENDOR ■R/D

權億科技股份有限公司
Master Wave Technology Co., Ltd.

承 認 書

APPROVAL SHEET

Customers: 中磊電子股份有限公司

Customer Model No.: 6172019CMW

Master Wave Model No.:98241MRSX005-270

Product Description: 8241 Replacement Ant.

Issue Date: 2009/7/2

REV.: 00

客戶承認用印 Customer Approved	權億承認用印 Confirmation Signature
	權億科技股份有限公司 2009.7.2 發行章 RF BU

核准 Approve	主管 Chief	承辦 Responsible
Hero	Hero	S.Y.Liu

MASTER WAVE TECHNOLOGY CO., LTD.
權億科技股份有限公司
Address: 2F.,No.20,Lane 1,Nanyuan 2nd RD., Taiwan(R.O.C)
Tel: +886-3-4519540 Fax: +886-3-4519542

Shengyih Electronic Plastic Co. Ltd (Shou Zhou)
聲億電子塑膠有限公司 (蘇州廠)
Address: No.95 Wusong south Rd of Luzhi Town Wu zhong Area Suzhou City, China
Tel：+86-512-65046030 Fax：+86-512-65046033

Shengyih Electronic Plastic Manufactory (Dongguan)
聲億電子塑膠製品廠 (東莞廠)
Address: Mu-Lun Administration Area, Changping Town,Dongguan City.Guangdong Province,China
Tel：+86-769-83914045 Fax：+86-769-83914046

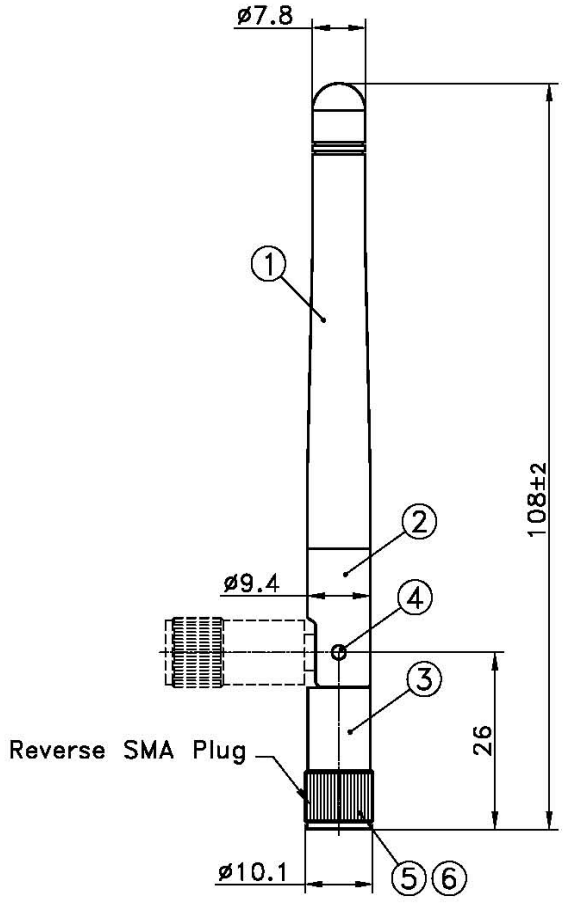
Table of Contents

Item

Modification History:

REV.	Date	Content
00	2009/7/2	

REV	ZONE	DESCRIPTION	ENG	APPROVED	DATE



Electrical Properties	
Frequency Range	2.4~2.4835 GHz
Impedance	50Ω
V.S.W.R.	≤2.0
Radiation	Omni
Gain	2 dBi
Polarization	Vertical
Mechanical Properties	
Whip	TPE
Connector	Brass
Weight	-
Operating Temp	-20℃~+65℃

ITEM	Name	Material	Finish	QTY
⑥	Connector	Brass	–	1
⑤	接頭外套	POM	Black	1
④	鉚釘	POM	Black	2
③	下固定座	PA101	Black	1
②	上固定座	PA101	Black	1
①	外套	TPE	Black	1

UNLESS OTHERWISE SPECIFIED TOLERANCES ON:
X ± 1
X.X ± 0.5
X.XX ± 0.25
ANG. ± 2.0°

DATE: 2009/7/2
UNIT: mm
THIRD ANGLE PROJECTION
MAT'L:
FINISH:
SCALE: 1/1

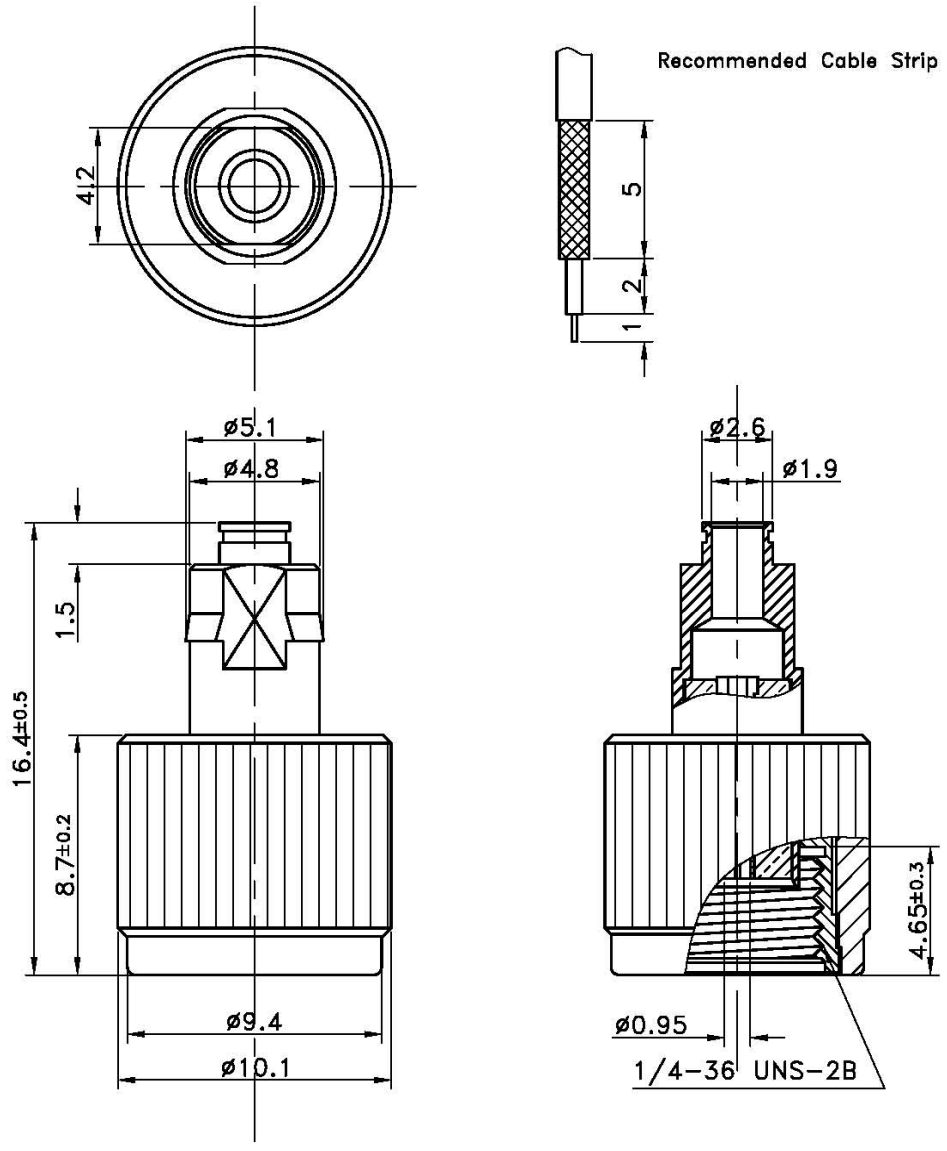
Master Wave Technology CO.,LTD

TITLE : 8241 Replacement Antenna

APPROVED BY:	CHECKED BY:	DESIGNED BY:	DRAWN BY: S.Y.Liu

MODEL NO. : 98241MRSX005-270 REV 00
PART NO. :

REV	ZONE	DESCRIPTION	ENG	APPROVED	DATE



UNLESS OTHERWISE SPECIFIED TOLERANCES ON: X ± 0.2, X.X ± 0.15, X.XX ± 0.1, ANG. ± 0.5°	DATE: 2009/6/12	MAT'L:	Master Wave Technology CO.,LTD
	UNIT: mm	FINISH:	
	THIRD ANGLE PROJECTION	SCALE: 4/1	TITLE : RP SMA PLUG FOR ANT.
APPROVED BY:	CHECKED BY:	DESIGNED BY:	DRAWN BY:
			MODEL NO. : 96RS01A-W0 REV 00
			PART NO. :

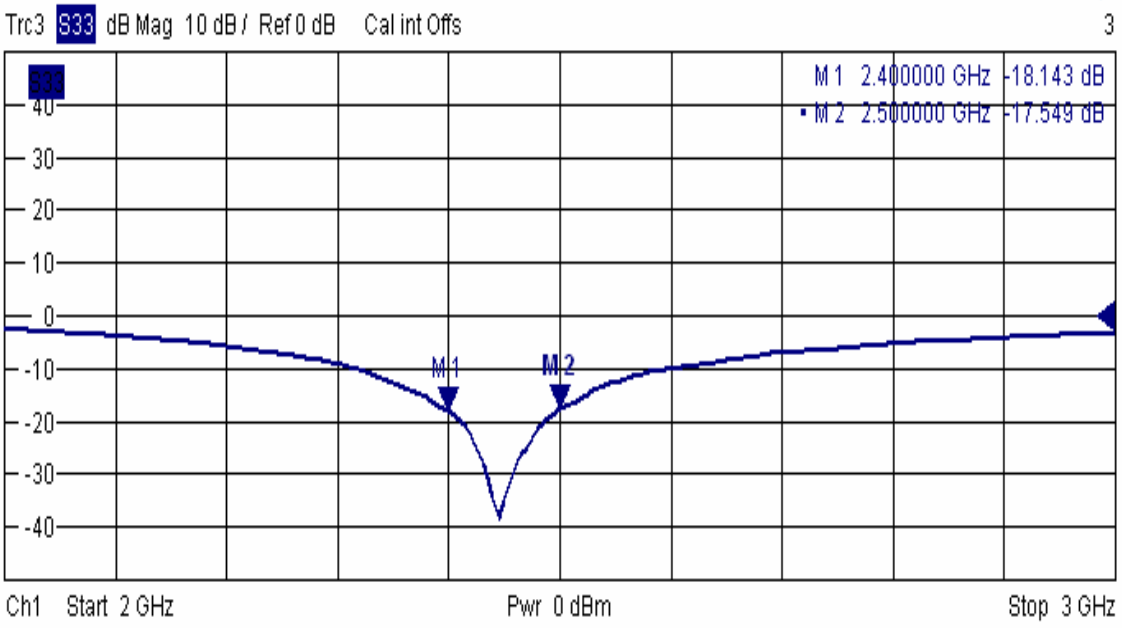
Electrical Properties

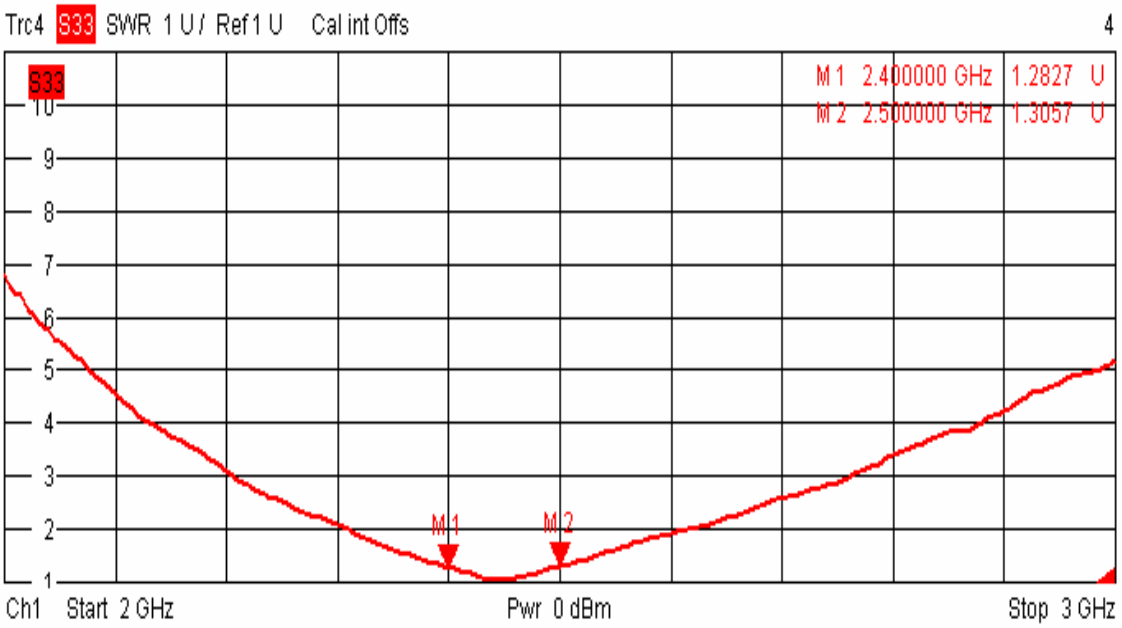
Type	8241 Replacement Antenna
Frequency range	2.4~2.5 GHz
Impedance	50 Ohms
VSWR	≦2.0

Mechanical Properties

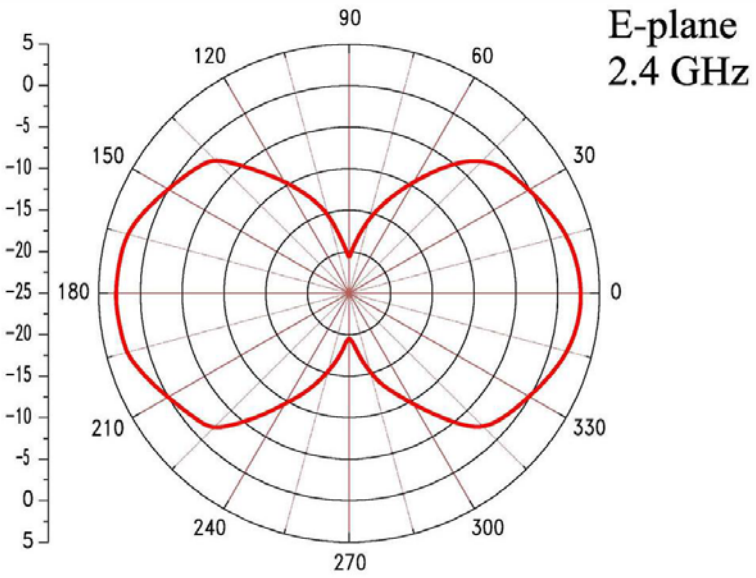
Material	TPE
Cable type	RG178
Dimension	108*⌀10

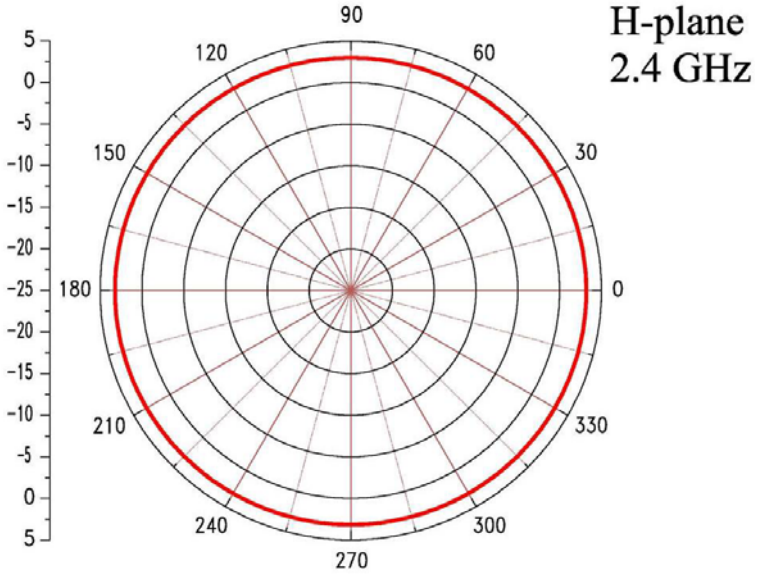
Electrical Test





Pattern Test





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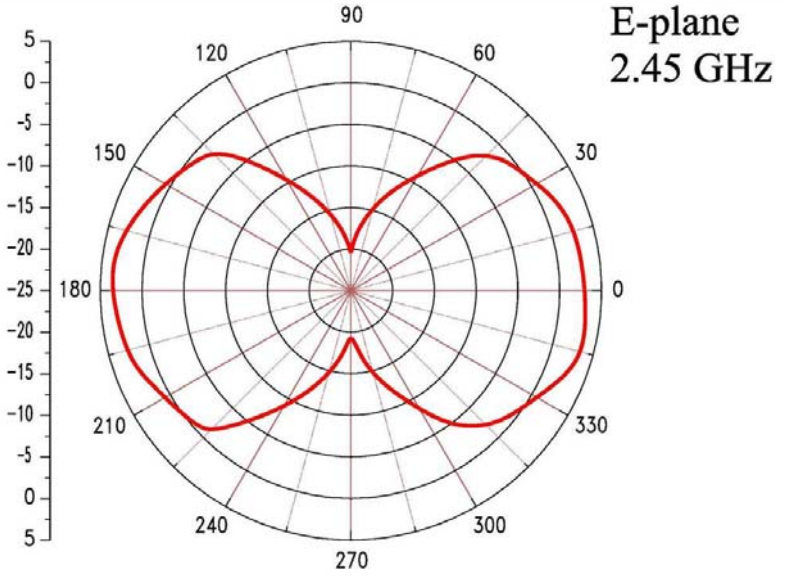
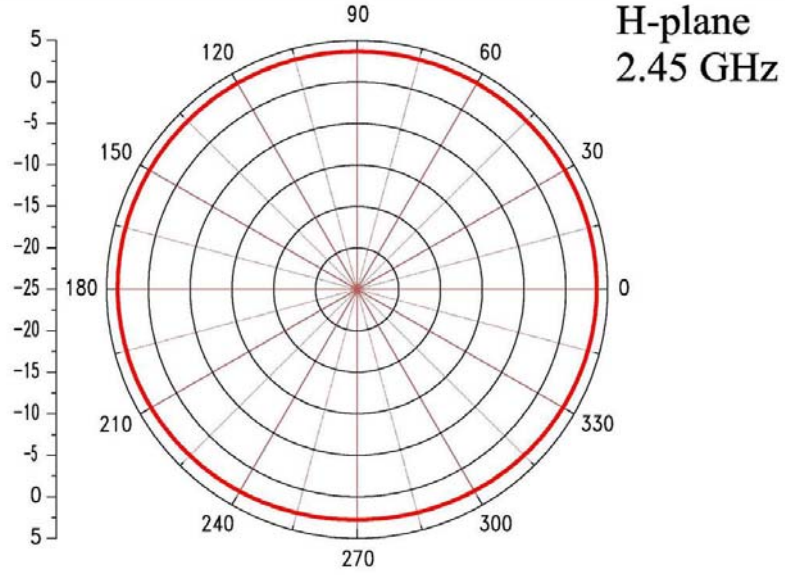
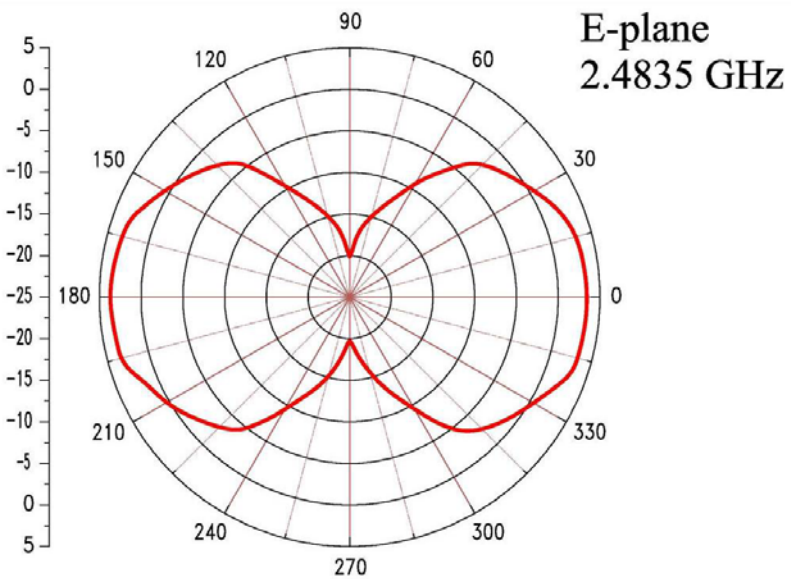
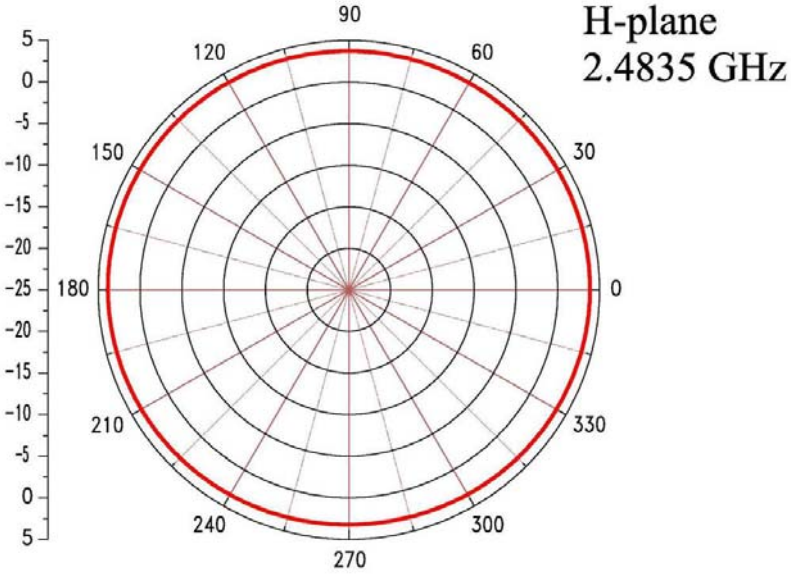




Pattern Test





Pattern Test

Test Date	2009/3/6		
Trade Name	Masterwave		
Model Name	241		
Frequency	2400	2450	2500
TC01 Note			
Ant. Port Input Pwr. (dBm)	0.00	0.00	0.00
Tot. Rad. Pwr. (dBm)	-0.51	-0.44	-0.58
Peak EIRP (dBm)	2.64	2.75	3.02
Directivity (dBi)	3.14	3.19	3.60
Efficiency (dB)	-0.51	-0.44	-0.58
Efficiency (%)	88.98	90.31	87.48
Gain (dBi)	2.64	2.75	3.02

Connector SMA

Electrical Properties	Impedance	50 ohm
	Frequency Range	0~6 GHz
	V.S.W.R	≦1.5
	Working Voltage	≦250Vrms
	Dielectric Withstanding	≦670 Vrms
	Voltage Insulation Resistance	≧2000 Megohms
	Contact Resistance	Center contact: 3.0 Milliohms (Max.) Outer contact: 2.0 Milliohms (Max.)
	Recommended coupling nut torque	4.0 in. lbs. ~ 8.8in. lbs.
	Coupling nut retention force	≧60 lbs.
	Contact captivation axial	≧6 lbs.
	Coupling Proof Torque	15 in-1bs.min
	Durability (mating)	≧500 cycles

Environmental Ratings	Operating Temperature	-65℃ ~ +165℃
	Thermal shock	MIL-STD-202,METHOD 107,Condition B
	Corrosion	MIL-STD-202,METHOD 101,Condition B
	Shock	MIL-STD-202,METHOD 213,Condition I
	Vibration	MIL-STD-202,METHOD 204,Condition D
	Moisture Resistance	MIL-STD-202,METHOD 106

Material Specifications	Material Data	Material
	Body	Brass
	Center Contact	Brass
	Insulator	Teflon or Delrin

ONLINE CERTIFICATIONS DIRECTORY

QMFZ2.E41938
Plastics - Component

Additional information regarding this certification can be found in UL's iQ Family of Databases (iq.ul.com).

NEW -- for additional information concerning the individual material, click on the material designation.

Page Bottom

Plastics - Component

See General Information for Plastics - Component

E I DUPONT DE NEMOURS & CO INC E41938
ENGINEERING POLYMERS
CHESTNUT RUN PLAZA
PO BOX 80713
WILMINGTON, DE 19880 USA

									H	D	
		Min.		H	H	R T I			V	4	C
		Thk	Flame	W	A	Elec	Mech		T	9	T
Material Dsg	Color	mm	Class	I	I		Imp	Str	R	5	I
6T/MPMDT, "ZYTEL", furnished as pellets.											
HTN51G25HSL	ALL	0.75	HB	2	0	150	125	130	1		0
		1.5	HB	0	0	150	125	140			
		3.0	HB	0	0	150	130	150			
Acetal "Polyoxymethylene" (POM), "Delrin", furnished as pellets.											
100CL	NC, BK	1.5	HB	3	0	100	80	85	0	5	0
		3.0	HB	3	0	100	80	85			
100P, 500P, 900P, 1700P											
	ALL	0.75	HB	4	0	50	50	50	0	5	0
		1.5	HB	4	0	110	85	90			
		3.0	HB	3	0	110	90	95			
100PA	NC	0.75	HB	-	-	50	50	50			
100ST	NC, BK	1.5	HB	3	0	105	85	85	0	5	0
		3.0	HB	3	0	105	85	85			
100T	NC	1.5	HB	3	0	100	85	85	0	5	0
		3.0	HB	3	0	100	85	85			
111DP	ALL	0.80	HB	4	0	50	50	50	0	5	0
		1.50	HB	4	0	110	85	90			
		3.20	HB	3	0	110	90	95			
111P	ALL	1.5	HB	4	0	110	85	90	0	5	0
		3.0	HB	3	0	110	90	95			
1260	ALL	0.75	HB	4	0	105	80	90	0	4	0
		1.5	HB	4	0	105	80	90			
		3.0	HB	3	0	105	85	90			
127UV	NC	0.84	HB	-	-	50	50	50			
140EM	ALL	0.8	HB	5	0	110	90	90	0	5	0
		3.0	HB	3	0	110	90	100			
150	NC	1.5	HB	4	0	50	50	50	0	2	0

		3.0	HB	4	0	50	50	50			
150SA	NC	1.5	HB	4	0	105	85	90	0	4	0
		3.0	HB	3	0	105	85	90			
		6.0	HB	2	0	105	85	90			
160	ALL	0.81	HB	4	0	115	90	90	0	3	0
		1.5	HB	3	0	115	90	90			
		3.0	HB	2	0	115	90	95			
1700SL(r8)	ALL	0.75	HB	-	-	50	50	50			
		3.0	HB	-	-	50	50	50			
1960	ALL	0.75	HB	-	-	50	50	50			
2700	ALL	0.75	HB	-	-	105	-	-	0	5	0
		1.5	HB	4	0	105	90	90			
		3.0	HB	3	0	105	90	105			
		6.0	HB	3	0	105	90	105			
2700A	ALL	0.8	HB	5	0	110	90	90	0	5	0
		3.0	HB	3	0	110	90	100			
270EM	ALL	0.8	HB	5	0	110	90	90	0	5	0
		3.0	HB	3	0	110	90	100			
300AS	BK	1.5	HB	-	-	50	50	50			
		3.0	HB	3	-	50	50	50			
300AT	BK	0.75	HB	-	-	50	50	50			
		1.5	HB	-	-	50	50	50			
		3.0	HB	-	-	50	50	50			
311DP	ALL	0.75	HB	4	0	50	50	50	0	5	0
		1.50	HB	4	0	110	85	90			
		3.00	HB	3	0	110	90	95			
390PM	NC	0.75	HB	-	-	50	50	50			
		1.5	HB	-	-	50	50	50			
		3.0	HB	-	-	50	50	50			
460	ALL	0.75	HB	4	0	105	80	90	0	4	0
		1.5	HB	3	0	105	80	90			
		3.0	HB	3	0	105	85	90			
500AL	NC, BK	0.75	HB	4	0	50	50	50	0	5	0
		1.5	HB	4	0	110	85	90			
		3.0	HB	3	0	110	90	95			
500CL	NC, BK	0.75	HB	4	0	50	50	50	0	5	0
		1.5	HB	3	0	100	80	85			
		3.0	HB	3	0	100	80	85			
500F	ALL	0.71	HB	4	0	105	85	90	0	4	0
		1.5	HB	4	0	105	85	90			
		3.0	HB	3	0	105	85	90			
500T	ALL	0.75	HB	4	0	105	85	85	0	5	0
		1.5	HB	4	0	105	85	85			
		3.0	HB	3	0	105	85	85			
510GR	NC	0.75	HB	-	-	50	50	50			
511P	ALL	0.75	HB	4	0	50	50	50	0	5	0

		1.5	HB	4	0	110	85	90			
		3.0	HB	3	0	110	90	95			
525GR	NC	0.75	HB	-	-	50	50	50	0	4	0
		1.5	HB	4	0	50	50	50			
		3.0	HB	4	0	50	50	50			
527UV	NC, OR, BK	0.84	HB	-	-	50	50	50			
560	ALL	0.75	HB	4	0	105	80	90	0	4	0
		1.5	HB	4	0	105	80	90			
		3.0	HB	3	0	105	85	90			
570	NC	1.5	HB	4	0	105	85	90	0	5	
		3.0	HB	2	0	105	85	90			
		6.0	HB	4	0	105	85	90			
577	BK	1.5	HB	4	0	105	85	90	0	5	
		3.0	HB	2	0	105	85	90			
		6.0	HB	4	0	105	85	90			
588P(r1)	ALL	0.8	HB	-	-	50	50	50	0	5	0
		1.5	HB	4	0	110	85	90			
		3.0	HB	3	0	110	90	95			
85G, 89G	ALL	1.5	HB	4	0	110	85	90	0	5	0
		3.0	HB	3	0	110	90	95			
900F	ALL	0.71	HB	4	0	105	85	90	0	5	0
		1.5	HB	4	0	105	85	90			
		3.0	HB	3	0	105	85	90			
900SP	NC	0.75	HB	4	0	50	50	50	0	5	0
		1.5	HB	4	0	110	85	90			
		3.0	HB	3	0	110	90	95			
90EM	ALL	0.8	HB	5	0	110	90	90	0	5	0
		3.0	HB	3	0	110	90	100			
911AL	ALL	0.75	HB	4	0	50	50	50	0	5	0
		1.5	HB	4	0	110	85	90			
		3.0	HB	3	0	110	90	95			
911P	ALL	0.75	HB	4	0	50	50	50	0	5	0
		1.5	HB	4	0	110	85	90			
		3.0	HB	3	0	110	90	95			
988P	ALL	1.5	HB	4	0	110	85	90	0	5	0
		3.0	HB	3	0	110	90	95			
DC110	ALL	0.75	HB	-	-	105	-	-	0	5	0
		1.5	HB	4	0	105	90	90			
		3.0	HB	3	0	105	90	105			
		6.0	HB	3	0	105	90	105			
DE10072	NC	1.5	HB	-	-	50	50	50			
		3.0	HB	-	-	50	50	50			
DE13009(r1)	ALL	0.75	HB	4	0	50	50	50	0	5	0
		1.5	HB	4	0	110	85	90			
		3.0	HB	3	0	110	90	95			
DE20028(r1)	ALL	0.75	HB	4	0	50	50	50	0	5	0

		1.5	HB	4	0	110	85	90			
		3.0	HB	3	0	110	90	95			
DE20055, 500MP	NC	1.5	HB	-	-	50	50	50			
		3.0	HB	-	-	50	50	50			
DE20066	ALL	0.75	HB	-	-	50	50	50			
		3.0	HB	-	-	50	50	50			
DE20171(d)	ALL	0.8	HB	-	-	50	50	50			
		3.0	HB	-	-	50	50	50			
DE20242(r1)	ALL	0.75	HB	4	0	50	50	50	0	5	0
		1.50	HB	4	0	110	85	90			
		3.00	HB	3	0	110	90	95			
DE20279(r2)	NC, BK	0.8	HB	-	-	50	50	50			
DE20311(d), 988PA(d)											
	ALL	0.8	HB	-	-	50	50	50			
		3.0	HB	-	-	50	50	50			
DE20323(r2)	NC, BK	0.8	HB	-	-	50	50	50			
DE20412(r8)	ALL	0.75	HB	-	-	50	50	50			
		3.0	HB	-	-	50	50	50			
DE7031	NC	1.5	HB	-	-	50	50	50			
		3.0	HB	-	-	50	50	50			
DE7057	ALL	0.75	HB	4	0	50	50	50	0	5	0
		1.5	HB	4	0	110	85	90			
		3.0	HB	3	0	110	90	95			
DE8100HP	NC	0.82	HB	-	-	50	50	50	0	5	0
		1.5	HB	4	0	75	75	75			
		3.0	HB	3	0	90	75	90			
DE8500HP	NC, BK	0.75	HB	4	0	50	50	50	0	5	0
		1.5	HB	4	0	75	75	75			
		3.0	HB	3	0	90	75	90			
DE8502	NC	0.75	HB	4	0	50	50	50	0	5	0
		1.5	HB	4	0	110	85	90			
		3.0	HB	3	0	110	90	95			
DE8504	ALL	0.75	HB	4	0	50	50	50	0	5	0
		1.5	HB	4	0	110	85	90			
		3.0	HB	3	0	110	90	95			
DE8902	ALL	0.75	HB	4	0	50	50	50	0	5	0
		1.5	HB	4	0	110	85	90			
		3.0	HB	3	0	110	90	95			
DE8903	NC	0.75	HB	4	0	50	50	50	0	5	0
		1.5	HB	4	0	110	85	90			
		3.0	HB	3	0	110	90	95			
DE8904	ALL	0.75	HB	4	0	50	50	50	0	5	0
		1.5	HB	4	0	110	85	90			
		3.0	HB	3	0	110	90	95			
DE9100, DE9100A, 200PL, 100, 107, 500(f1), 500D, 500HP, 507(f1), 900, 900HP											
	ALL	0.75	HB	-	-	50	50	50	0	4	0

		1.5	HB	3	0	105	85	90			
		3.0	HB	3	0	105	85	90			
		6.0	HB	2	0	105	85	90			
DE9206	NC	0.81	HB	4	0	50	50	50	0	5	0
		1.5	HB	4	0	50	50	50			
		3.0	HB	4	0	50	50	50			
DE9422(r1)	NC, BK	0.75	HB	4	0	50	50	50	0	5	0
		1.5	HB	4	0	110	85	90			
		3.0	HB	3	0	110	90	95			
DE9488	NC, BK	0.75	HB	4	-	50	50	50	0	5	0
		1.5	HB	4	0	110	85	90			
		3.0	HB	3	0	110	90	95			
DE9494	NC	0.75	HB	-	-	50	50	50			
II 100, II 500	NC, GY, BK	0.75	HB	3	0	50	50	50	0	4	0
		1.5	HB	3	0	110	85	90			
		3.0	HB	2	0	110	90	95			
II 150SA, II 150E	NC	1.5	HB	3	0	110	85	90	0	4	0
		3.0	HB	2	0	110	90	95			
M590	NC	0.75	HB	5	0	50	50	50	0	3	0
		0.8	HB	5	0	50	50	50			
		1.5	HB	4	0	50	50	50			
		1.6	HB	4	0	50	50	50			
		3.0	HB	3	0	50	50	50			
Acetal "Polyoxymethylene" (POM), furnished as pellets.											
ACE270(v)	ALL	0.75	HB	-	-	50	50	50			
ACE90	ALL	0.75	HB	-	-	50	50	50			
Acetal/Polytetrafluorethylene (POM/PTFE), "Delrin", furnished as pellets.											
500AF, 100AF	ALL	1.5	HB	4	0	105	85	90	0	4	0
		3.0	HB	2	0	105	85	90			
500TL	ALL	1.5	HB	4	0	105	85	90	0	4	0
		3.0	HB	2	0	105	85	90			
520MP	NC, BK	1.5	HB	3	0	105	85	90	0	4	0
		3.0	HB	2	0	105	85	90			
DE9152	ALL	1.5	HB	4	0	105	85	90	0	4	0
		3.0	HB	2	0	105	85	90			
Acrylate Styrene Acrylonitrile (ASA), "Delrin", furnished as pellets.											
100AL	NC	0.75	HB	-	-	50	50	50			0
		3.0	HB	-	-	50	50	50			
Liquid Crystal Polymer (LCP), "Vespel", furnished as finished parts.											
TP-1012	BK	2.0	V-0	-	-	130	130	130			
Liquid Crystal Polymer (LCP), 10% GLASS REINFORCED,15% MINERAL FILLED, "ZENITE", furnished as pellets.											
7223	WT	1.5	V-0	0	1	130	130	130			2
		3.0	V-0	0	1	130	130	130			
Liquid Crystal Polymer (LCP), 30% glass filled LCP material, "ZENITE", furnished as pellets.											
2130	NC	1.5	V-0	2	2	130	130	130	3		3
		3.0	V-0	1	1	130	130	130			

Liquid Crystal Polymer (LCP), is a glass and mineral reinforced LCP material, "ZENITE", furnished as pellets.										
6244L(c)	BK	1.5	V-0	-	-	130	130	130		
Liquid Crystal Polymer (LCP), lubricated, glass filled, "ZENITE", furnished as pellets.										
ZE16103	BK	0.75	V-0	1	3	240	220	240	3	3
	BK, WT	1.5	V-0	1	3	240	220	240		
		3.0	V-0	0	3	240	220	240		
Liquid Crystal Polymer (LCP), mineral reinforced, "ZENITE", furnished as pellets.										
7738	NC	1.6	V-0	-	-	130	130	130		
Liquid Crystal Polymer (LCP), "ZENITE", furnished as pellets.										
1110	BK	3.0	V-0	-	-	130	130	130		
1130	BK	3.0	V-0	-	-	130	130	130		
1935	BK	1.5	V-0	-	-	130	130	130		
3130L(%)	WT, BK	0.81	V-0	2	4	130	130	130	4	4
		1.5	V-0	2	4	130	130	130		
		3.0	V-0	1	4	130	130	130		
3140L(%)	BK	0.84	V-0	-	-	130	130	130	0	4
	WT, BK	1.5	V-0	-	-	130	130	130		
		3.0	V-0	1	0	130	130	130		
3226L	NC, BK	1.6	V-0	-	-	130	130	130		
	WT	3.0	V-0	-	-	130	130	130		
5115L	WT, BK	0.79	V-0	-	-	130	130	130		4
		1.5	V-0	-	-	130	130	130		
		3.0	V-0	-	-	130	130	130		
5130L(e)	ALL	0.8	V-0	-	-	130	130	130		
		1.5	V-0	-	-	130	130	130		
		3.0	V-0	-	-	130	130	130		
5145L(e)	ALL	0.8	V-0	4	0	130	130	130		4
		1.5	V-0	3	0	130	130	130		
		3.0	V-0	3	0	130	130	130		
5244L(b)	WT, BK, BL	0.8	V-0	-	-	130	130	130		
		1.5	V-0	-	-	130	130	130		
	ALL	3.0	V-0	-	-	130	130	130		
6115L	WT, BK	0.75	V-0	2	4	240	220	240	4	4
		1.5	V-0	1	4	240	220	240		
		3.0	V-0	0	4	240	220	240		
6130(+)	BK	0.19	V-0	-	-	130	130	130	4	4
	ALL	0.38	V-0	4	4	130	130	130		
		0.75	V-0	3	4	240	220	240		
		1.5	V-0	1	4	240	220	240		
		3.0	V-0	0	4	240	220	240		
6130HL	BK	0.4	V-0	-	-	130	130	130	4	4
		0.75	V-0	3	4	240	220	240		
	BK, WT	1.50	V-0	1	4	240	220	240		
		3.0	V-0	0	4	240	220	240		
6130L(f1)	NC, BK, GY	1.5	V-0	1	4	240	220	240	4	3
	GN, BL	1.5	V-0	1	4	240	220	240		

		3.0	V-0	0	4	240	220	240			
6130L(m)	BK	0.38	V-0	-	-	240	130	130	4		3
		0.75	V-0	3	4	240	220	240			
	WT	1.0	V-0	3	4	240	220	240			
	ALL	1.5	V-0	1	4	240	220	240			
		3.0	V-0	0	4	240	220	240			
6130LX(+)	BK	0.40	V-0	-	-	130	130	130			3
		0.75	V-0	3	0	240	220	240			
	ALL	1.5	V-0	2	0	240	220	240			
		3.0	V-0	0	0	240	220	240			
6140	WT	0.75	V-0	1	3	240	220	240	3		3
		1.5	V-0	1	3	240	220	240			
		3.0	V-0	0	3	240	220	240			
6140L	BK	0.40	V-0	4	3	130	130	130	3		3
		0.75	V-0	1	3	240	220	240			
	ALL	1.5	V-0	1	3	240	220	240			
		3.0	V-0	0	3	240	220	240			
6330	ALL	1.5	V-0	0	0	240	220	240	0	4	3
		3.0	V-0	0	0	240	220	240			
6330L	BK	0.75	V-0	-	-	240	220	240	0	4	3
	ALL	1.5	V-0	0	0	240	220	240			
		3.0	V-0	0	0	240	220	240			
6635(R)	BK, NC	1.5	V-0	-	-	130	130	130			
7130	WT, BK	0.4	V-0	-	-	130	130	130	0		4
	ALL	0.75	V-0	3	4	240	210	240			
		1.5	V-0	2	4	240	210	240			
		3.0	V-0	1	4	240	210	240			
7130(+)	WT, BK	0.4	V-0	-	-	130	130	130	0		4
	NC, WT, BK	0.75	V-0	3	4	240	210	240			
		1.5	V-0	2	4	240	210	240			
		3.0	V-0	1	4	240	210	240			
7130L	ALL	0.75	V-0	3	4	240	210	240	0		4
		1.5	V-0	2	4	240	210	240			
		3.0	V-0	1	4	240	210	240			
7130L(+)	NC, WT, BK	0.75	V-0	3	4	240	210	240	0		4
		1.5	V-0	2	4	240	210	240			
		3.0	V-0	1	4	240	210	240			
7140X(c)	BK	0.40	V-0	-	-	130	130	130			
	NC, BK	0.75	V-0	-	-	130	130	130			
7145L	BK	0.75	V-0	0	4	240	210	240	0		3
	WT, BK	1.5	V-0	0	4	240	210	240			
		3.0	V-0	0	4	240	210	240			
7225	BK	0.4	V-0	-	-	130	130	130			
	NC, BK	0.75	V-0	-	-	130	130	130			
7244	NC, BK	0.35	V-0	-	-	130	130	130			
77110	BK	0.4	V-0	-	-	130	130	130			

Liquid Crystal Polymer (LCP), "Zenite", furnished as pellets.											
77110L	NC, BK	0.4	V-0	-	-	130	130	130			
Liquid Crystal Polymer (LCP), "ZENITE", furnished as pellets.											
7755	BK	1.5	V-0	-	-	130	130	130			
9140HT(f1)	BK	0.75	V-0	-	0	130	130	130			
9140HT(f2)	BK	0.3	V-0	-	0	130	130	130			
	NC, BK	0.75	V-0	-	0	130	130	130			
9255HT	BK	0.75	V-0	-	-	130	130	130			
9340HT	BK	1.5	V-0	-	-	130	130	130			
95140	NC, BK	0.4	V-0	-	-	130	130	130			
95140L	BK	0.4	V-0	-	-	130	130	130			5
95330	NC	0.4	V-0	-	-	130	130	130			
95540	BK	0.4	V-0	-	-	130	130	130			
9555HT	BK	0.4	V-0	-	-	130	130	130			
ZE15101(+)	BK, WT	0.8	V-0	-	-	130	130	130			
		1.5	V-0	-	-	130	130	130			
ZE15201(b)	BK, WT	0.8	V-0	-	-	130	130	130			
		1.5	V-0	-	-	130	130	130			
		3.0	V-0	-	-	130	130	130			
ZE16105(+)	BK	0.40	V-0	-	-	130	130	130			3
		0.75	V-0	3	0	240	220	240			
	ALL	1.5	V-0	2	0	240	220	240			
		3.0	V-0	0	0	240	220	240			
ZE16130A	BK	1.5	V-0	-	-	130	130	130			
ZE16202(c)	BK	1.5	V-0	-	-	130	130	130			
Liquid Crystal Polymer (LCP), "Zenite", furnished as pellets.											
ZE16401	BK	1.5	V-0	-	-	130	130	130			
Liquid Crystal Polymer (LCP), "ZENITE", furnished as pellets.											
ZE17101(r3)	BK	0.3	V-0	-	-	130	130	130	0		4
	WT, BK	0.75	V-0	3	4	240	210	240			
		1.5	V-0	2	4	240	210	240			
		3.0	V-0	1	4	240	210	240			
ZE17110(c)	BK	0.40	V-0	-	-	130	130	130			
	NC, BK	0.75	V-0	-	-	130	130	130			
Liquid Crystal Polymer (LCP), "Zenite", furnished as pellets.											
ZE17201	BK	3.0	V-0	-	-	130	130	130			
Liquid Crystal Polymer (LCP), "ZENITE", furnished as pellets.											
ZE17205	NC, BK	0.35	V-0	-	-	130	130	130			
ZE17235	NC, BK	0.4	V-0	-	-	130	130	130			
ZE19301	BK	1.5	V-0	-	-	130	130	130			
ZE55201	BK	0.8	V-0	3	4	130	130	130			3
		1.5	V-0	2	3	130	130	130			
		3.0	V-0	1	0	130	130	130			
ZE55205	BK	0.8	-	3	0	130	130	130	3	5	3
		1.5	V-0	3	2	130	130	130			
		3.0	V-0	0	2	130	130	130			

ZE55801(r5)	NC	1.5	V-0	-	-	130	130	130			
Polyamide (PA), amorphous, "Zytel", furnished as pellets.											
330	NC	0.86	V-2	4	0	90	65	90	0	5	0
		1.5	V-2	3	0	90	65	90			
		3.0	V-2	2	0	90	65	90			
ST901L	NC	0.75	HB	-	-	-	-	-			
Polyamide (PA), "Zytel", furnished as pellets.											
HTN53G50HSLRHF	BK	0.83	HB	-	-	65	65	65			
		3.0	HB	-	-	65	65	65			
HTN53G50LRHF	ALL	0.83	HB	-	-	65	65	65			
		3.0	HB	-	-	65	65	65			
HTNFE350031	BK	0.83	HB	-	-	65	65	65			0
		3.0	HB	-	-	65	65	65			
Polyamide 6 (PA6), glass reinforced, "Zytel", furnished as pellets.											
73G15HSL	BK	1.5	HB	-	-	65	65	65			
73G15L	NC	1.5	HB	-	-	65	65	65			
73G20L	NC	1.5	HB	-	-	65	65	65			
73G25L	NC	1.5	HB	-	-	65	65	65			
73G30HSL	NC, BK	0.75	HB	4	0	65	65	65			
		1.5	HB	4	0	65	65	65			
		3.0	HB	4	0	65	65	65			
73G30L	WT, RD	0.75	HB	4	0	65	65	65			0
	ALL	1.5	HB	4	0	65	65	65			
		3.0	HB	2	0	65	65	65			
73G30T	ALL	1.5	HB	-	-	65	65	65			
73G35HSL	BK	1.5	HB	-	-	65	65	65			
73G45L	NC, BK	1.5	HB	-	-	65	65	65			
73G50W	BK	0.75	HB	-	-	65	65	65			
Polyamide 6 (PA6), "Zytel", furnished as pellets.											
211	NC	1.5	HB	4	0	65	65	65	0	5	0
		3.0	HB	4	0	65	65	65			
7300	NC, RD, BK	0.75	V-2	-	-	65	65	65			
7300T	NC	0.75	HB	-	-	65	65	65			
7335F	NC, BK	1.5	HB	-	-	-	-	-			
EFE7300HSLT	BK	3.0	HB	-	-	65	65	65			
EFE7370	OR, BL	0.75	HB	4	-	65	65	65			
		1.5	HB	4	-	65	65	65			
		3.0	HB	4	-	65	65	65			
FR73G20GWF	GY	0.75	V-2	4	0	65	65	65			0
		1.5	V-2	3	0	65	65	65			
		3.0	V-2	2	0	65	65	65			
ST811HS	NC	0.75	HB	-	-	130	65	65	0	6	1
		1.5	HB	-	-	130	105	100			
		3.0	HB	3	0	130	105	110			
Polyamide 6 (PA6), furnished as pellets.											
7331J	ALL	0.75	V-2	-	-	65	65	65	0	6	0

		1.5	V-2	4	0	65	65	65			
		3.0	V-2	3	0	65	65	65			
		6.0	V-2	3	0	65	65	65			
Polyamide 6/12 (PA6/12), 33% glass reinforced,lubricated,heat stabilized , "ZYTEL", furnished as pellets.											
FE5382	BK	0.75	HB	-	-	65	65	65		5	
		1.5	HB	-	-	65	65	65			
		3.0	HB	-	-	65	65	65			
Polyamide 6/12 (PA6/12), glass reinforced, "Zytel", furnished as pellets.											
77G33L	NC, BK	0.71	HB	4	0	105	-	-	0	5	0
		1.5	HB	3	0	120	-	120			
		3.0	HB	3	0	120	-	120			
77G43L	NC, BK	0.71	HB	4	0	105	-	-	0	5	0
		1.5	HB	4	0	120	-	120			
		3.0	HB	3	0	120	-	120			
Polyamide 6/12 (PA6/12), glass reinforced, lubricated, heat stabilized, "Zytel", furnished as pellets.											
77G33HS1L	NC	0.75	HB	4	0	65	65	65			1
		1.5	HB	4	0	65	65	65			
		3.0	HB	4	0	65	65	65			
Polyamide 6/12 (PA6/12), "Zytel", furnished as pellets.											
151, 151L	NC	0.86	V-2	4	0	105	65	65	0	5	0
		1.5	V-2	4	0	105	65	65			
		3.0	V-2	3	0	105	65	65			
153HSL	NC	0.86	HB	4	0	105	65	65	0	5	0
		1.5	HB	4	0	105	65	65			
		3.0	HB	3	0	105	65	65			
157HSL	BK	0.86	HB	4	0	105	65	65	0	5	0
		1.5	HB	4	0	105	65	65			
		3.0	HB	3	0	105	65	65			
158, 158L	NC	0.86	HB	4	0	105	65	65	0	5	0
		1.5	HB	4	0	105	65	65			
		3.0	HB	3	0	105	65	65			
FE15013HS	NC	0.75	HB	-	-	65	65	65			
Polyamide 6/66 (PA6/66), glass and mineral reinforced, "Zytel", furnished as pellets.											
EFE7298	NC	0.8	HB	-	-	65	65	65			
Polyamide 6/66 (PA6/66), Glass reinforced, "Zytel", furnished as pellets.											
FE18016	BK, GY	0.75	HB	4	0	65	65	65			0
		1.5	HB	4	0	65	65	65			
		3.0	HB	4	0	65	65	65			
Polyamide 6/66 (PA6/66), glass reinforced, flame retardant, toughened, "Zytel", furnished as pellets.											
FR82G33V1	BK	1.5	V-1	0	0	130	65	65			1
		3.0	V-1	0	0	130	65	65			
Polyamide 6/66 (PA6/66), "Zytel", furnished as pellets.											
72G33W	BK	0.75	HB	-	-	65	65	65			
FE180002	GY	0.75	HB	-	-	65	65	65			
FE18033	BK	0.75	HB	-	-	65	65	65			
FR7250V0	NC, BK, RD	0.75	V-0	4	0	130	65	65			3

	ALL	1.5	V-0	0	0	130	65	65			
		3.0	V-0	0	0	130	65	65			
FR7280V0	BK	0.75	V-0	4	0	130	65	65			3
		1.5	V-0	3	0	130	65	65			
		3.0	V-0	0	0	130	65	65			
Polyamide 66 (PA66), "Maranyl", furnished as pellets.											
A125J	NC, BK	0.71	V-2	-	-	105	-	-	0	5	
		1.5	V-2	2	0	105	75	85			
		3.0	V-2	2	0	105	75	85			
A127(+)	ALL	0.71	V-2	4	0	140	95	115	0	6	0
		1.5	V-2	4	0	140	110	125			
		3.0	V-2	3	0	140	110	125			
A175S	ALL	0.71	-	-	-	105	-	-	0	5	
		1.5	HB	4	0	105	95	105			
		3.0	HB	2	0	110	95	110			
A190S	ALL	0.71	HB	4	0	115	95	115	0	5	1
		1.5	HB	4	0	125	105	125			
		3.0	HB	0	0	130	105	130			
A192J	NC	0.75	-	-	-	105	-	-	0	5	
		1.5	HB	3	0	105	75	105			
		3.0	HB	2	0	105	80	105			
A192S	ALL	0.71	-	-	-	105	-	-	1	6	
		1.5	HB	2	0	130	115	130			
		3.0	HB	0	0	130	120	130			
A225	NC	0.75	V-2	-	-	105	-	-	0	5	
	ALL	1.5	V-2	2	0	105	75	85			
		3.0	V-2	2	0	105	75	85			
A226	NC	0.71	V-2	-	-	105	-	-	0	5	
	ALL	1.5	V-2	2	0	105	75	85			
		3.0	V-2	2	0	105	75	85			
A228	ALL	0.71	V-2	4	0	130	75	85	0	6	0
		1.5	V-2	3	0	130	75	85			
		6.0	V-2	2	0	130	75	85			
		3.0	V-2	2	0	130	75	85			
A290	ALL	1.5	HB	3	0	105	75	105	0	5	
		3.0	HB	2	0	105	75	105			
A428	ALL	0.75	V-0	4	1	130	65	85	1		0
		1.5	V-0	3	0	130	65	85			
		3.0	V-0	1	0	130	65	85			
A690	ALL	0.83	HB	2	0	115	120	120	0	6	0
		1.5	HB	2	0	115	120	120			
		3.0	HB	2	0	115	120	120			
A690S	ALL	0.83	HB	2	0	120	115	115	0	6	0
		1.5	HB	0	0	120	125	125			
		3.0	HB	0	0	120	130	130			
TA510	NC, BK	1.5	HB	-	-	-	-	-			

		3.0	HB	-	-	-	-	-			
Polyamide 66 (PA66), glass and mineral filled, "MINLON", furnished as pellets.											
FE6190	BK	0.75	HB	-	-	65	65	65			
Polyamide 66 (PA66), mineral, "Minlon", furnished as pellets.											
10B40(a), 10B140	NC, BK	0.71	HB	4	0	105	65	65	0	5	0
		1.5	HB	4	0	120	105	115			
		3.0	HB	4	0	120	115	115			
11C140(a)	ALL	0.81	HB	4	0	65	65	65	0	6	1
		1.5	HB	2	0	65	65	65			
		3.0	HB	1	0	65	65	65			
11C40(a)	ALL	0.81	HB	4	0	65	65	65	1		
		1.5	HB	3	0	65	65	65			
12T(a)	NC, BK, GY	0.81	HB	4	0	65	65	65	0	6	1
		1.5	HB	3	0	65	65	65			
		3.0	HB	3	0	65	65	65			
22C	NC, BK	0.81	HB	-	-	65	65	65	1		1
		1.5	HB	1	0	65	65	65			
		3.0	HB	0	0	65	65	65			
73M30	NC	0.85	HB	-	-	65	65	65			
73M40	NC	0.85	HB	-	-	65	65	65			
Polyamide 66 (PA66), flame retardant, "Zytel", furnished as pellets.											
FE13001	ALL	0.94	V-0	2	0	120	65	65	2	6	2
		1.5	V-0	2	0	120	65	65			
		3.0	V-0	1	0	120	65	65			
FR15(+)	ALL	0.75	V-0	4	1	130	75	85	1		0
		1.5	V-0	3	0	130	75	85			
		3.0	V-0	1	0	130	75	85			
FR7025V0F(+)	ALL	0.75	V-0	3	0	130	75	85	0		0
		1.5	V-0	3	0	130	75	85			
		3.0	V-0	1	0	130	75	85			
Polyamide 66 (PA66), Flame Retardant, Glass Reinforced, "Zytel", furnished as pellets.											
FE130004	BK, NC	0.75	V-0	0	0	130	125	130			2
		3.0	V-0	0	0	130	125	130			
Polyamide 66 (PA66), flame retardant, glass reinforced, "Zytel", furnished as pellets.											
FE19015	ALL	0.75	V-0	-	-	130	105	105			2
		1.5	V-0	-	-	130	115	115			
		3.0	V-0	-	-	130	115	120			
FE19030	ALL	0.75	V-0	0	0	65	65	65	1		2
		1.5	V-0	0	0	65	65	65			
		3.0	V-0	0	0	65	65	65			
FR50(+)(f1)	ALL	0.35	V-0	-	-	-	-	-	1	6	2
		0.75	V-0	0	0	130	105	105			
	NC, BK	1.5	V-0, 5VA	0	0	130	115	115			
		3.0	V-0, 5VA	0	0	130	115	120			
FR70G25V0	ALL	0.50	V-0	3	0	65	65	65	4	6	2
		0.83	V-0	3	0	120	120	130			

		1.5	V-0, 5VA	3	0	130	120	130			
		3.0	V-0	3	0	130	120	130			
FR70M30V0(f1)	ALL	0.75	V-2	3	0	105	95	105	1	6	2
		1.0	V-0	3	0	105	95	105			
		1.5	V-0	2	0	120	105	115			
	NC, BK, GY	1.5	5VA	2	0	120	105	115			
	ALL	3.0	V-0	0	0	120	115	115			
Polyamide 66 (PA66), glass reinforced, "Zytel", furnished as pellets.											
70G13HS1L	NC, BK	0.71	HB	4	0	140	125	140	1	5	0
		1.5	HB	4	0	140	125	140			
		3.0	HB	4	0	140	125	140			
70G13L	ALL	0.71	HB	4	0	125	120	125	1	5	0
		1.5	HB	4	0	125	120	125			
		3.0	HB	4	0	125	120	125			
70G20HSL	NC, BK	0.71	HB	-	-	140	125	140	0	6	
		1.5	HB	-	-	140	125	140			
		3.0	HB	1	0	140	125	140			
70G25HSL	NC, BK	0.71	HB	-	-	140	125	140	0	6	
		1.5	HB	-	-	140	125	140			
		3.0	HB	2	0	140	125	140			
70G25HSLR	ALL	0.71	-	-	-	105	-	-	0	5	
		1.5	HB	4	0	120	95	105			
		3.0	HB	2	0	120	95	110			
70G30HSL, 70G30HSLR											
	NC, BK	0.75	HB	4	0	140	125	140	0	6	1
		1.5	HB	4	0	140	125	140			
		3.0	HB	1	0	140	125	140			
70G30L	ALL	0.71	HB	4	0	130	120	130	1	5	0
		1.5	HB	4	0	130	120	130			
		3.0	HB	4	0	130	120	130			
70G30PSR, FG70G30PSR											
	NC, BK	0.81	HB	4	0	120	105	120	1	5	0
		1.5	HB	4	0	120	105	120			
		3.0	HB	4	0	120	105	120			
70G33HSL(+), 70G33HS1L(+)											
	ALL	0.71	HB	4	0	140	125	140	0	5	1
		1.5	HB	4	0	140	125	140			
		3.0	HB	0	0	140	125	140			
		-	-	-	-	-	-	-			
70G33L(+)	ALL	0.71	HB	4	0	130	120	130	1	5	0
		1.5	HB	4	0	130	120	130			
		3.0	HB	4	0	130	120	130			
70G35HSL	NC, BK	0.71	HB	4	0	140	125	140	0	5	2
		1.5	HB	4	0	140	125	140			
		3.0	HB	0	0	140	125	140			
70G43L	NC, BK, RD, GY	0.71	HB	4	0	130	120	130	1	5	0

		1.5	HB	4	0	130	120	130			
		3.0	HB	4	0	130	120	130			
70G50HSL	ALL	0.83	HB	2	0	120	115	115	0	6	0
		1.5	HB	0	0	120	125	125			
		3.0	HB	0	0	120	130	130			
70GB40HSL	BK	0.75	HB	-	-	65	65	65			
71G13HS1L	NC, BK	0.71	HB	4	0	105	65	105	1	5	0
		1.5	HB	4	0	120	105	120			
		3.0	HB	4	0	120	105	120			
71G13L	NC, BK, GY	0.71	HB	4	0	65	65	110	0	5	0
		1.5	HB	4	0	65	65	110			
		3.0	HB	4	0	65	65	110			
71G33L	NC, BK	0.71	HB	4	0	130	120	130	1	5	0
		1.5	HB	4	0	130	120	130			
		3.0	HB	3	0	130	120	130			
79G13HSL	BK	0.81	HB	4	0	105	65	105	1	6	2
		1.5	HB	4	0	120	105	120			
		3.0	HB	2	0	120	105	120			
79G13L	NC	1.5	HB	4	0	90	65	90	1	5	0
		3.0	HB	4	0	90	65	90			
Polyamide 66 (PA66), Glass Reinforced, "Zytel", furnished as pellets.											
DMX65G15AH	NC, BK	0.75	HB	4	0	65	65	65			1
		3.0	HB	4	0	65	65	65			
Polyamide 66 (PA66), glass reinforced, "Zytel", furnished as pellets.											
EFE7185	ALL	0.71	-	-	-	105	-	-	0	5	
		1.5	HB	4	0	105	95	105			
		3.0	HB	2	0	110	95	110			
FE5128	BK	0.71	HB	4	0	130	120	130	1	5	0
		1.5	HB	4	0	130	120	130			
		3.0	HB	4	0	130	120	130			
FE5171	ALL	0.71	HB	4	0	130	120	130	1	5	0
		1.5	HB	4	0	130	120	130			
		3.0	HB	4	0	130	120	130			
Polyamide 66 (PA66), glass reinforced, "ZYTEL", furnished as pellets.											
HTN53G50HSLR	NC, BK	0.75	HB	3	1	65	65	65			0
		1.5	HB	0	1	65	65	65			
		3.0	HB	0	1	65	65	65			
Polyamide 66 (PA66), glass reinforced, "Zytel", furnished as pellets.											
HTNFE150050	NC, BK	0.75	HB	3	1	65	65	65			0
		1.5	HB	0	1	65	65	65			
		3.0	HB	0	1	65	65	65			
JB67P	ALL	0.71	-	-	-	105	-	-	0	5	
		1.5	HB	3	0	105	75	105			
		3.0	HB	2	0	105	80	105			
Polyamide 66 (PA66), Glass Reinforced , "Zytel", furnished as pellets.											
DMX65G30AH	NC, BK	0.75	HB	4	0	65	65	65			1

		3.0	HB	4	0	65	65	65			
Polyamide 66 (PA66), glass reinforced, modified, "Zytel", furnished as pellets.											
EMXFR503VO	BK	0.75	V-0	-	-	65	65	65			
Polyamide 66 (PA66), mineral filled, flame retardant, "ZYTEL", furnished as pellets.											
FR70M40GW	GY	0.75	V-2	1	0	105	95	105			1
		3.0	V-2	1	0	120	115	115			
Polyamide 66 (PA66), toughened, "Zytel", furnished as pellets.											
450	NC, BK	0.81	HB	4	0	65	65	65	0		0
		1.5	HB	3	0	65	65	65			
		3.0	HB	3	0	65	65	65			
450HSL	BK, NC	0.81	HB	4	0	105	75	85	1	6	0
		1.5	HB	4	0	105	75	85			
		3.0	HB	3	0	105	75	85			
490	ALL	0.75	HB	3	0	65	65	65	0		0
		1.5	HB	3	0	65	65	65			
		3.0	HB	2	0	65	65	65			
490HS	BK	0.75	HB	-	-	65	65	65			
MT407	NC	0.81	HB	5	0	125	65	95	1	5	0
		1.5	HB	4	0	125	65	95			
		3.0	HB	4	0	125	65	95			
ST701HS	BK	0.75	HB	-	-	65	65	65			
		1.5	HB	-	-	65	65	65			
		3.0	HB	-	-	65	65	65			
ST800HSL	ALL	0.75	HB	4	0	130	105	110	0	6	0
		1.5	HB	4	0	130	105	110			
		3.0	HB	3	0	130	105	110			
ST801	ALL	0.81	HB	4	0	125	75	85	0	5	0
		1.5	HB	3	0	125	75	85			
		3.0	HB	3	0	125	75	85			
Polyamide 66 (PA66), toughened, "ZYTEL", furnished as pellets.											
ST801A	ALL	0.81	HB	4	0	125	75	85	0	5	0
		1.5	HB	3	0	125	75	85			
		3.0	HB	3	0	125	75	85			
ST801AHS	ALL	0.75	HB	4	0	130	65	95	0	6	0
		1.5	HB	4	0	130	105	105			
		3.0	HB	3	0	130	105	110			
Polyamide 66 (PA66), toughened, "Zytel", furnished as pellets.											
ST801HS	ALL	0.75	HB	4	0	130	65	95	0	6	0
		1.5	HB	4	0	130	105	105			
		3.0	HB	3	0	130	105	110			
Polyamide 66 (PA66), toughened, glass reinforced, "Zytel", furnished as pellets.											
8018	ALL	1.5	HB	4	-	65	65	65			
		3.0	HB	4	-	65	65	65			
80G14	ALL	1.5	HB	4	-	65	65	65			
		3.0	HB	4	-	65	65	65			
80G14HS, 8018HS	NC, BK	0.75	HB	-	-	120	65	85	0	6	1

		1.5	HB	-	-	120	95	105			
		3.0	HB	3	0	120	105	105			
80G33HS1L	NC, BL, BK, GY	0.75	HB	3	0	130	65	85	0	6	1
		1.5	HB	1	0	130	105	95			
		3.0	HB	1	0	130	105	105			
80G33L	NC, GY, BK	0.75	HB	3	0	120	65	85	0	6	1
		1.5	HB	2	0	120	105	95			
		3.0	HB	1	0	120	105	105			
84G33	ALL	0.75	HB	3	0	105	65	120	1		0
		1.5	HB	2	0	120	90	120			
		3.0	HB	0	0	120	90	120			
Polyamide 66 (PA66), "Zytel", furnished as pellets.											
101(+)(f1), 101F(+)(f1), 101L(+)(f1), E101(+)(f1), E101L(f1), 132F(+)(f1), 135F(+)(f1)											
	ALL	0.71	V-2	4	0	130	75	85	0	6	0
		1.5	V-2	3	0	130	75	85			
		3.0	V-2	2	0	130	75	85			
		6.0	V-2	2	0	130	75	85			
103FHS(+), 103HSL(+), 103HSLC(+)											
	ALL	0.71	V-2	4	0	140	95	115	0	6	0
		1.5	V-2	4	0	140	110	125			
		3.0	V-2	3	0	140	110	125			
105(f1), 105F(f1)	BK	0.71	V-2	4	0	125	65	65	0	6	0
		1.5	V-2	3	0	125	75	85			
		3.0	V-2	2	0	125	75	85			
		6.0	V-2	2	0	125	75	85			
109L	NC	0.81	V-2	4	0	-	-	-	0	6	0
		1.5	V-2	3	0	125	75	75			
		3.0	V-2	2	0	125	75	75			
114L	WT, BK	0.81	HB	4	0	65	65	65	1	6	0
		1.5	HB	4	0	65	65	65			
		3.0	HB	3	0	65	65	65			
122L	NC	0.75	HB	-	-	65	65	65	0	6	0
	ALL	1.5	HB	3	0	125	75	85			
		3.0	HB	2	0	125	75	85			
		6.0	HB	2	0	125	75	85			
145(f1)	BK	0.81	V-2	4	0	125	65	65	0	6	0
		1.5	V-2	3	0	125	75	85			
		3.0	V-2	2	0	125	75	85			
		6.0	V-2	2	0	125	75	85			
3189	NC, OR	0.81	HB	4	-	125	65	65			
		1.5	HB	-	-	125	75	85			
3189HSL	NC	0.75	HB	4	0	130	65	95	0	6	0
	BK	1.5	HB	4	0	130	105	105			
		3.0	HB	4	1	130	105	110			
408, 408L	ALL	0.81	HB	3	0	-	-	-	0	5	0
		1.5	HB	4	0	125	75	85			

		3.0	HB	4	0	125	75	85			
408HS	NC	0.81	HB	4	0	125	75	85	0	5	0
	BK	1.5	HB	4	0	125	75	85			
		3.0	HB	3	0	125	75	85			
420HSL	ALL	0.75	HB	4	0	65	65	65	1		1
		1.5	HB	3	0	65	65	65			
		3.0	HB	3	0	65	65	65			
42A	NC	0.71	HB	4	0	125	65	65	0	6	0
		1.5	HB	3	0	125	75	85			
		3.0	V-2	2	0	125	75	85			
		6.0	V-2	2	0	125	75	85			
45HSB(+)	ALL	0.71	HB	4	0	140	95	115	1	6	0
		1.5	HB	4	0	140	110	125			
		3.0	HB	3	0	140	110	125			
70G50HSLA	BK	0.83	HB	4	0	120	115	115			1
		1.5	HB	4	0	120	125	125			
		3.0	HB	4	0	120	130	130			
70G50L	NC	0.75	HB	-	-	65	65	65			
		3.0	HB	-	-	65	65	65			
74G20HSL	BK	0.8	HB	-	-	65	65	65			
74G33EL	ALL	1.5	HB	3	0	105	75	105	0	5	
		3.0	HB	2	0	105	75	105			
75LG50HSL(f1)	BK	1.5	HB	4	0	120	125	125			1
		3.0	HB	4	0	120	130	130			
75LG50L	NC	1.5	HB	4	0	65	65	65			0
		3.0	HB	4	0	65	65	65			
Polyamide 66 (PA66), "ZYTEL", furnished as pellets.											
DMXST601H	NC, BK	0.75	HB	3	0	65	65	65	1		0
		1.5	HB	3	0	65	65	65			
		3.0	HB	2	0	65	65	65			
Polyamide 66 (PA66), "Zytel", furnished as pellets.											
E42A	NC	0.81	HB	4	0	-	-	-	0	5	0
		1.5	HB	2	0	-	-	-			
		3.0	V-2	2	0	-	-	-			
EFE1030	ALL	0.71	V-2	4	0	125	-	-	0		
		1.5	V-2	3	0	125	75	85			
		3.0	V-2	2	0	125	75	85			
		6.0	V-2	2	0	125	75	85			
EFE1068(+), 148(+)	ALL	0.71	V-2	4	0	130	75	85	0	6	0
		1.5	V-2	3	0	130	75	85			
		3.0	V-2	2	0	130	75	85			
		6.0	V-2	2	0	130	75	85			
EFE1091	BK	0.81	HB	4	0	65	65	65	1	6	0
		1.5	HB	4	0	125	75	85			
		3.0	HB	4	0	125	75	85			
EFE270027	BK	0.75	HB	-	-	65	65	65			

Polyamide 66 (PA66), "ZYTEL", furnished as pellets.											
EFE6120	GY, NC	0.75	V-2	3	0	105	95	105			2
		1.5	V-2	2	0	120	105	115			
		3.0	V-2	0	0	120	115	115			
Polyamide 66 (PA66), "Zytel", furnished as pellets.											
EMXFR507KVO	BK	1.5	V-0	-	-	65	65	65			
		3.0	V-0	-	-	65	65	65			
EMXFR507VO	BK	1.0	V-0	-	-	65	65	65			
		3.0	V-0	-	-	65	65	65			
FE130008	NC, BK	0.8	V-0	0	0	65	65	65			
FE190005	BK	0.8	V-0	-	-	65	65	65			
FE2400	NC	0.81	HB	-	-	65	65	65			
FE2789	NC	0.75	HB	-	-	65	65	65	0	6	0
	ALL	1.5	HB	3	0	125	75	85			
		3.0	HB	2	0	125	75	85			
FE3681(+)(f1)	BK	0.81	V-2	4	0	125	-	-	0	6	0
		1.5	V-2	3	0	125	75	85			
		3.0	V-2	2	0	125	75	85			
		6.0	V-2	2	0	125	75	85			
FE3757(+)	ALL	0.75	V-2	4	0	130	75	85	0		0
		1.5	V-2	3	0	130	75	85			
		3.0	V-2	2	0	130	75	85			
Polyamide 66 (PA66), "ZYTEL", furnished as pellets.											
FR50HF(f1)	ALL	0.45	V-0	-	-	-	-	-	1	6	2
		0.75	V-0	0	0	130	105	105			
	NC, BK	1.5	V-0, 5VA	0	0	130	115	115			
		3.0	V-0, 5VA	0	0	130	115	120			
FR7026V0F	NC, BK	0.4	V-0	3	0	-	-	-	0		0
		0.82	V-0	3	0	130	95	110			
		1.5	V-0	3	0	130	95	110			
		3.0	V-0	2	0	130	95	110			
Polyamide 66 (PA66), "Zytel", furnished as pellets.											
FR70G25NHV0, FE230004											
	NC, GY, BK	0.4	V-0	0	0	85	-	-	2		0
		0.75	V-0	0	0	95	90	100			
		1.5	V-0, 5VA	0	0	95	105	115			
		3.0	V-0	0	0	95	110	120			
Polyamide 66 (PA66), "ZYTEL", furnished as pellets.											
MT409AHS(f2)	NC, BK	0.8	HB	4	0	130	65	95	0	6	0
		1.5	HB	4	0	130	105	105			
		3.0	HB	4	0	130	105	110			
ST801AW	ALL	0.75	HB	3	0	125	75	85	0		0
		1.5	HB	3	0	125	75	85			
		3.0	HB	1	0	125	75	85			
ST801W (f1)	ALL	0.75	HB	3	0	125	75	85	0		0
		1.5	HB	3	0	125	75	85			

		3.0	HB	1	0	125	75	85			
Polyamide 66/6 (PA66/6), flame retardant, glass reinforced, "Zytel", furnished as pellets.											
FR72G25V0	ALL	0.50	V-0	0	0	65	65	65	4	6	2
		0.83	V-0	0	0	140	120	140			
		1.5	V-0	0	0	140	120	140			
		3.0	V-0	0	0	140	120	140			
FR72G25V1D	NC	0.38	V-2	-	-	-	-	-	1	5	1
	GY, BK	0.74	V-2	0	0	115	95	95			
		1.5	V-1	0	0	125	105	105			
		3.0	V-1	0	0	130	105	120			
Polyamide 66/6 (PA66/6), glass reinforced, "Zytel", furnished as pellets.											
72G13L	NC	0.8	HB	-	-	65	65	65			
		3.0	HB	-	-	65	65	65			
72G33L	ALL	0.75	HB	3	0	130	120	130	0	5	1
		1.5	HB	1	0	130	120	130			
		3.0	HB	0	0	130	120	130			
72G43L	NC, BK	0.71	HB	3	0	105	65	105	0	5	0
		1.5	HB	1	0	120	120	120			
		3.0	HB	0	0	120	120	120			
74G33EHSL	ALL	0.71	-	-	-	105	-	-	1	6	
		1.5	HB	2	0	130	115	130			
		3.0	HB	0	0	130	120	130			
74G33J	ALL	0.81	HB	4	0	65	65	65	1		0
		1.5	HB	3	0	65	65	65			
		3.0	HB	2	0	65	65	65			
74G33L	ALL	0.84	HB	4	1	105	65	105	0		0
		1.5	HB	1	1	120	120	120			
		3.0	HB	0	1	120	120	120			
74G43J	ALL	0.75	HB	4	0	65	65	65	1		0
		1.5	HB	4	0	65	65	65			
		3.0	HB	4	0	65	65	65			
Polyamide 66/6 (PA66/6), glass reinforced, flame retardant, "Zytel", furnished as pellets.											
FR72G25V0LM	ALL	0.50	V-0	0	0	65	65	65	4	6	2
		0.83	V-0	0	0	140	120	140			
		1.5	V-0	0	0	140	120	140			
		3.0	V-0	0	0	140	120	140			
Polyamide 66/6 (PA66/6), glass reinforced, flame retardant, toughened, "Zytel", furnished as pellets.											
FR82G30V0	BK	1.5	V-0	0	0	65	65	65			1
		3.0	V-0	0	0	65	65	65			
Polyamide 66/6 (PA66/6), "Zytel", furnished as pellets.											
TRA100L	NC	0.75	HB	-	-	85	65	85			
		3.0	V-2	-	-	85	65	85			
Polyamide 6T/66 (PA6T/66), "Maranyl", furnished as pellets.											
H296(r6)	ALL	0.40	V-0	-	0	140	65	65	0	4	0
		0.75	V-0	0	0	140	115	125			
		1.5	V-0	0	0	140	115	125			

		3.0	V-0	0	0	140	120	130			
L496	ALL	0.75	V-0	0	0	140	120	120	1		2
		1.5	V-0	0	0	140	120	120			
		3.0	V-0	0	0	140	120	130			
Polyamide 6T/66 (PA6T/66), 15% GLASS REINFORCED, HEAT STABILIZED, "ZYTEL", furnished as pellets.											
HTN52G15HSL	ALL	0.75	HB	2	0	65	65	65	1		1
		1.5	HB	0	0	65	65	65			
		3.0	HB	0	0	65	65	65			
Polyamide 6T/66 (PA6T/66), 35% glass reinforced, "ZYTEL", furnished as pellets.											
HTNFR52G35BL	ALL	0.75	V-0	0	0	140	120	120	0		1
		1.5	V-0	0	0	140	120	120			
		3.0	V-0	0	0	140	120	130			
Polyamide 6T/66 (PA6T/66), 35% GLASS REINFORCED, HEAT STABILIZED, "Zytel", furnished as pellets.											
HTN52G35HSL	ALL	0.75	HB	2	0	150	125	130	1		0
		1.5	HB	0	0	150	125	140			
		3.0	HB	0	0	150	125	150			
Polyamide 6T/66 (PA6T/66), glass reinforced, "Zytel", furnished as pellets.											
HTNFR52G30NHF	ALL	0.40	V-0	-	1	140	-	-	0	5	0
		0.75	V-0	0	0	140	115	125			
		1.5	V-0	0	0	140	115	125			
		3.0	V-0	0	0	140	120	130			
Polyamide 6T/66 (PA6T/66), glass reinforced, flame retardant, "Zytel", furnished as pellets.											
HTNFR52G30L(+), FE15502(+), HTNFR52G30AL(+)											
	ALL	0.75	V-0	0	0	140	120	120	1		2
		1.5	V-0	0	0	140	120	120			
		3.0	V-0	0	0	140	120	130			
HTNFR52G35L(+), HTNFR52G35AL											
	ALL	0.75	V-0	0	0	140	120	120	1		1
		1.5	V-0	0	0	140	120	120			
		3.0	V-0	0	0	140	120	130			
Polyamide 6T/66 (PA6T/66), mineral reinforced,heat stabilized, "Zytel", furnished as pellets.											
HTNFR52G15AL	ALL	0.75	V-0	0	0	65	65	65	2		2
		1.5	V-0	0	0	65	65	65			
		3.0	V-0	0	0	65	65	65			
Polyamide 6T/66 (PA6T/66), "Zytel", furnished as pellets.											
FE250029	GY	0.46	V-0	-	-	125	0	0	0	5	0
		0.75	V-0	0	0	140	105	115			
		1.5	V-0	0	0	140	120	130			
		3.0	V-0	0	0	140	120	130			
Polyamide 6T/66 (PA6T/66), "ZYTEL", furnished as pellets.											
HTNFR52G15BL	ALL	0.82	V-0	0	0	140	120	120	4		2
		1.5	V-0	0	0	140	120	120			
		3.0	V-0	0	0	140	120	130			
Polyamide 6T/66 (PA6T/66), "Zytel", furnished as pellets.											
HTNFR52G20LX	NC, BK	0.75	V-0	-	-	140	120	120			
		1.5	V-0	-	-	140	120	120			

		3.0	V-0	-	-	140	120	130			
Polyamide 6T/66 (PA6T/66), "ZYTEL", furnished as pellets.											
HTNFR52G30BL(+)	ALL	0.75	V-0	0	0	140	120	120	0		1
		1.5	V-0	0	0	140	120	120			
	NC, BK	1.5	V-0, 5VA	0	0	140	120	120			
	ALL	3.0	V0	0	0	140	120	130			
Polyamide 6T/66 (PA6T/66), "Zytel", furnished as pellets.											
HTNFR52G30LX	NC, BK	0.4	V-0	-	-	65	65	65	1		2
	ALL	0.75	V-0	0	0	140	120	120			
		1.5	V-0	0	0	140	120	120			
		3.0	V-0	0	0	140	120	130			
HTNFR52G30NH(r6)	ALL	0.40	V-0	-	0	140	-	-	0	4	0
		0.75	V-0	0	0	140	115	125			
		1.5	V-0	0	0	140	115	125			
		3.0	V-0	0	0	140	120	130			
Polyamide 6T/66 (PA6T/66), "ZYTEL", furnished as pellets.											
HTNFR52G45BL	ALL	0.75	V-0	0	0	140	120	120	0		1
		1.5	V-0	0	0	140	120	120			
		3.0	V-0	0	0	140	120	130			
Polyamide 6T/66 (PA6T/66), "Zytel", furnished as pellets.											
HTNFR52G45LX	NC, BK	0.75	V-0	-	-	140	120	120			
		1.5	V-0	-	-	140	120	120			
		3.0	V-0	-	-	140	120	130			
HTNFR52G45NHLW	BK	0.40	V-0	0	1	65	65	65	0	5	0
		3.0	V-0	0	0	65	65	65			
Polyamide 6T/MPMDT, high temperature, "Zytel", furnished as pellets.											
HTN51G15HSL	ALL	0.75	HB	3	0	150	125	130			1
		1.5	HB	1	0	150	125	140			
		3.0	HB	0	0	150	130	150			
HTN51G35HSL(f1)(f3)											
	ALL	0.85	HB	2	0	150	125	130	2		0
		1.5	HB	0	0	150	125	140			
		3.0	HB	0	0	150	130	150			
HTN51G45HSL	ALL	0.85	HB	2	1	150	120	130	0		0
		1.5	HB	0	1	150	125	140			
		3.0	HB	0	1	150	150	150			
HTNFR51G35L(+)	ALL	0.81	V-0	0	2	150	120	130	1	6	1
		1.5	V-0	0	2	150	125	140			
		3.0	V-0	0	2	150	130	150			
Polyamide 6T/MPMDT, mineral reinforced, heat stabilized, "Zytel", furnished as pellets.											
EFE6108	NC, BK	0.85	HB	-	-	50	50	50			
Polyamide 6T/MPMDT, "Zytel", furnished as pellets.											
EFE5004	NC	0.75	HB	-	-	150	65	65			0
	WT	3.0	HB	-	-	150	65	65			
HTN51LG50HSL	BK	1.5	HB	4	2	150	125	140			0
		3.0	HB	4	2	150	150	150			

HTNFE8200	NC	0.75	HB	-	-	65	65	65			
		1.5	HB	-	-	65	65	65			
		3.0	HB	-	-	65	65	65			
Polyamide 6T/XT, "Zytel", furnished as pellets.											
HTN54G15HSLR	BK	0.8	HB	-	-	150	105	115			1
		1.5	HB	-	-	150	120	130			
		3.0	HB	-	-	150	130	140			
HTN54G35HSLR	BK	0.75	HB	4	0	150	105	115			0
		1.5	HB	4	0	150	120	130			
		3.0	HB	3	0	150	130	140			
HTN54G50HSLR	BK	0.75	HB	4	0	150	110	130			0
		1.5	HB	4	0	150	120	140			
		3.0	HB	3	0	150	130	150			
Polybutylene Terephthalate (PBT), 20% glass-fibre reinforced., "CRASTIN", furnished as pellets.											
T803	BK	0.75	HB	-	-	75	75	75			
Polybutylene Terephthalate (PBT), flame retardant, "Crastin", furnished as pellets.											
LW9030FR	NC, BK	0.75	V-0	3	3	140	125	130	4	6	1
	ALL	1.5	V-0	2	3	140	125	130			
	BK	2.0	V-0, 5VA	2	3	140	125	130			
	ALL	3.0	V-0, 5VA	1	3	140	130	140			
		6.0	V-0, 5VA	0	3	140	130	140			
Polybutylene Terephthalate (PBT), flame retardant, unreinforced, "Crastin", furnished as pellets.											
S650FR	ALL	0.75	V-0	4	0	130	130	130	3	7	2
		1.5	V-0	3	0	130	130	130			
		3.0	V-0	2	0	130	130	130			
		6.0	V-0	1	0	130	130	130			
S660FR (f2)	NC, BK	0.40	V-0	4	1	-	-	-	3		2
	ALL	0.75	V-0	4	0	140	120	140			
		1.5	V-0	4	0	140	120	140			
		3.0	V-0	3	0	140	120	140			
S680FR (+)	ALL	0.75	V-0	-	-	75	75	75			
		1.5	V-0	-	-	75	75	75			
		3.0	V-0	-	-	75	75	75			
Polybutylene Terephthalate (PBT), glass reinforced, "CRASTIN", furnished as pellets.											
CE15015	ALL	0.71	HB	4	2	130	120	130	0	5	2
		1.5	HB	4	1	130	120	130			
		3.0	HB	1	0	130	130	140			
CE15030	ALL	0.71	HB	4	0	140	120	140	0	5	1
		1.5	HB	2	0	140	130	140			
		3.0	HB	1	1	140	130	140			
Polybutylene Terephthalate (PBT), glass reinforced, "Crastin", furnished as pellets.											
SK601	ALL	0.75	-	-	-	130	115	120	1	6	2
		1.5	HB	3	1	130	115	120			
		3.0	HB	3	1	130	115	120			
		6.0	HB	1	1	130	115	120			
SK602	ALL	0.75	-	-	-	130	115	120	1	6	2

		1.5	HB	3	1	130	115	120			
		3.0	HB	3	1	130	115	120			
		6.0	HB	1	1	130	115	120			
SK603	ALL	0.75	HB	-	-	130	130	130	2	6	2
		1.5	HB	2	1	130	130	130			
		3.0	HB	1	1	130	130	130			
		6.0	HB	0	1	130	130	130			
SK605	ALL	0.75	HB	-	-	130	130	130	1	5	1
		1.5	HB	3	1	130	130	130			
		3.0	HB	2	0	130	130	130			
		6.0	HB	0	0	130	130	130			
Polybutylene Terephthalate (PBT), glass reinforced, "CRASTIN", furnished as pellets.											
SK608	ALL	0.75	HB	-	-	130	125	130	0	5	1
		1.5	HB	3	1	130	125	130			
		3.0	HB	2	1	130	125	130			
Polybutylene Terephthalate (PBT), glass reinforced, "Crastin", furnished as pellets.											
SK609	ALL	0.75	HB	3	1	130	125	130	0	5	1
		1.5	HB	2	0	130	125	130			
		3.0	HB	1	1	130	125	130			
		6.0	HB	1	2	130	125	130			
Polybutylene Terephthalate (PBT), glass reinforced blends, "Crastin", furnished as pellets.											
LW9020	ALL	0.75	-	-	-	130	125	130	2	6	0
		1.5	HB	2	2	130	125	130			
		3.0	HB	0	3	130	130	130			
		6.0	HB	0	3	130	130	130			
LW9030	ALL	0.75	-	-	-	130	125	130	2	5	1
		1.5	HB	2	3	130	125	130			
		3.0	HB	0	3	130	130	130			
		6.0	HB	0	3	130	130	130			
LW9130	ALL	0.75	HB	-	-	140	125	140	3	5	2
		1.5	HB	2	2	140	130	140			
		3.0	HB	1	2	140	140	140			
		6.0	HB	0	1	140	140	140			
LW9320 (+)	ALL	0.75	HB	4	0	130	125	130	0		1
		1.5	HB	3	0	130	125	130			
		3.0	HB	3	0	130	130	130			
LW9330(+)	ALL	0.75	HB	3	0	130	125	130	0		1
		1.5	HB	2	0	130	125	130			
		3.0	HB	0	0	130	130	130			
Polybutylene Terephthalate (PBT), glass reinforced blends, flame retardant, "Crastin", furnished as pellets.											
LW9020FR	ALL	0.75	-	-	-	140	115	120	4	6	2
		1.5	V-0	2	3	140	115	120			
		3.0	V-0	1	3	140	120	130			
		6.0	V-0	0	3	140	120	130			
Polybutylene Terephthalate (PBT), glass reinforced, flame retardant, "Crastin", furnished as pellets.											
CE1075	ALL	0.75	-	-	-	130	130	130	4	6	3

		1.5	V-0	3	1	130	130	130			
		3.0	V-0	2	1	130	130	130			
		6.0	V-0	1	1	130	130	130			
Polybutylene Terephthalate (PBT), glass reinforced, flame retardant, "CRASTIN", furnished as pellets.											
CE2801	BK	0.75	V-0	-	-	75	75	75			
Polybutylene Terephthalate (PBT), glass reinforced, flame retardant, "Crastin", furnished as pellets.											
CE7931	ALL	1.5	V-0	3	0	130	130	140	0	6	2
		3.0	V-0	2	0	130	130	140			
SK641FR	ALL	0.75	-	-	-	140	130	140	1	6	2
	GY	0.75	V-0	-	-	140	130	140			
	ALL	1.5	V-0	2	1	140	130	140			
		3.0	V-0	1	1	140	130	140			
		6.0	V-0	0	1	140	130	140			
SK642FR	ALL	0.75	-	-	-	140	130	140	2	6	3
		1.5	V-0	2	1	140	130	140			
		3.0	V-0	1	1	140	130	140			
		6.0	V-0	1	1	140	130	140			
SK643FR (f2)	ALL	0.75	V-0	3	3	140	130	140	2	6	3
		1.5	V-0	2	0	140	130	140			
		3.0	V-0	1	0	140	130	140			
		6.0	V-0	1	0	140	130	140			
SK645FR (f1)	BK, GY	0.75	V-0	3	0	140	125	140	2	5	2
		1.5	V-0	2	0	140	125	140			
		3.0	V-0	1	0	140	130	140			
		6.0	V-0	1	0	140	130	140			
Polybutylene Terephthalate (PBT), glass reinforced, flame retardant, "CRASTIN", furnished as pellets.											
SK645FR (f2)	ALL	0.75	V-0	3	0	140	125	140	2	5	2
		1.5	V-0	2	0	140	125	140			
		3.0	V-0	1	0	140	125	140			
		6.0	V-0	1	0	140	125	140			
Polybutylene Terephthalate (PBT), glass reinforced, flame retardant, "Crastin", furnished as pellets.											
SK645FRC	ALL	0.75	V-0	-	-	140	125	140	3	5	3
		1.5	V-0	2	2	140	125	140			
		3.0	V-0	1	2	140	130	140			
SK652FR (+)	ALL	0.81	V-0	3	0	140	130	140	3	6	3
		1.5	V-0	3	0	140	130	140			
		3.0	V-0	2	0	140	130	140			
Polybutylene Terephthalate (PBT), glass reinforced, flame retardant, "CRASTIN", furnished as pellets.											
SK652FR1	ALL	0.81	V-0	3	0	130	130	140	0	6	2
		1.5	V-0, 5V-A	3	0	130	130	140			
		3.0	V-0, 5V-A	2	0	130	130	140			
Polybutylene Terephthalate (PBT), glass reinforced, flame retardant, "Crastin", furnished as pellets.											
SK655FR1 (n)	ALL	0.4	V-0	4	0	120	-	-	0	7	2
		0.81	V-0	3	0	130	130	140			
		1.5	V-0, 5V-A	3	0	130	130	140			
		3.0	V-0, 5V-A	2	0	130	130	140			

SK662FR (+)	ALL	0.30	V-0	3	0	-	-	-	2	6	2
		0.75	V-0	3	0	130	130	140			
		1.5	V-0	2	0	130	130	140			
		3.0	V-0	1	0	130	130	140			
SK665FR (+)	ALL	0.30	V-0	4	0	-	-	-	0	5	2
		0.75	V-0	3	0	130	130	140			
		1.5	V-0	2	0	130	130	140			
		3.0	V-0	1	0	130	130	140			
Polybutylene Terephthalate (PBT), glass reinforced, flame retardant, "CRASTIN", furnished as pellets.											
SK665FR(f1)	NC	1.5	V-0	2	0	130	130	140	0	5	2
		3.0	V-0	1	0	130	130	140			
Polybutylene Terephthalate (PBT), glass reinforced, mineral reinforced, "Crastin", furnished as pellets.											
HTI619	ALL	0.75	-	-	-	130	125	130	0	5	0
		1.5	HB	1	0	130	125	130			
		3.0	HB	0	1	130	125	130			
		6.0	HB	0	1	130	125	130			
SO653	ALL	0.80	-	-	-	120	115	120	1	6	2
		1.5	HB	3	1	120	115	120			
		3.0	HB	3	0	120	115	120			
		6.0	HB	2	1	120	115	120			
SO655	ALL	0.80	HB	4	0	120	120	120	1	6	2
		1.5	HB	3	0	120	120	120			
		3.0	HB	2	0	120	120	120			
		6.0	HB	2	1	120	120	120			
Polybutylene Terephthalate (PBT), glass reinforced, mineral reinforced, flame retardant, "Crastin", furnished as pellets.											
HTI668FR	ALL	0.75	-	-	-	125	125	125	0	4	0
	NC	1.0	V-0	-	-	125	125	125			
	ALL	1.5	V-0	1	0	125	125	125			
		3.0	V-0	0	0	125	125	125			
		6.0	V-0	1	2	125	125	125			
LW685FR	ALL	0.85	V-0	3	3	130	130	140	1		2
		1.5	V-0	2	3	130	130	140			
	NC, BK	2.2	5VA	2	3	130	130	140			
	ALL	3.0	V-0	1	3	130	130	140			
Polybutylene Terephthalate (PBT), toughened, flame retardant, "Crastin", furnished as pellets.											
ST830FR (f2)	ALL	0.85	V-0	4	0	130	130	130	0		0
		2.7	V-0, 5VA	3	0	130	130	130			
		3.0	V-0, 5VA	2	0	130	130	130			
Polybutylene Terephthalate (PBT), toughened, flame retardant, "CRASTIN", furnished as pellets.											
ST830FRUV (f2)	NC	0.85	V-0	4	0	130	130	130	0		0
		1.5	V-0	3	0	130	130	130			
		3.0	V-0	2	0	130	130	130			
Polybutylene Terephthalate (PBT), toughened, flame retardant, "Crastin", furnished as pellets.											
T850FR	ALL	1.5	V-0	-	-	75	75	75			0
		3.0	V-0	-	-	75	75	75			
Polybutylene Terephthalate (PBT), toughened, flame retardant, glass reinforced, "Crastin", furnished as pellets.											

T841FR (r4)	NC	0.75	V-0	-	-	130	115	115	3	6	2
	ALL	1.5	V-0	2	0	130	130	130			
		3.0	V-0	1	0	130	130	130			
		6.0	V-0	1	0	130	130	130			
T843FR (+)	ALL	1.5	V-0	2	0	130	120	130	3	6	2
		3.0	V-0	1	0	130	130	130			
		6.0	V-0	1	0	130	130	130			
T845FR (+)	ALL	1.5	V-0	2	2	140	130	140	3	6	2
		3.0	V-0	1	1	140	140	140			
		6.0	V-0	0	2	140	140	140			
Polybutylene Terephthalate (PBT), toughened, glass reinforced, "Crastin", furnished as pellets.											
T805 (f1)	ALL	0.75	HB	-	-	130	130	130	2	6	1
		1.5	HB	2	2	140	130	140			
		3.0	HB	1	2	140	130	140			
		6.0	HB	0	2	140	130	140			
Polybutylene Terephthalate (PBT), unreinforced, "CRASTIN", furnished as pellets.											
6129, 6129C	NC	0.92	HB	4	0	75	75	75	0	6	0
		1.5	HB	3	0	75	75	75			
		3.0	HB	2	0	75	75	75			
6130, 6130C	NC, BK	0.81	HB	4	0	75	75	75	0	5	0
		1.5	HB	2	0	75	75	75			
		3.0	HB	2	0	75	75	75			
6131, 6131C	NC	0.88	HB	4	0	75	75	75	0	6	0
		1.5	HB	3	0	75	75	75			
		3.0	HB	2	0	75	75	75			
S600F10	ALL	0.75	-	-	-	130	115	120	0	5	2
		1.5	HB	3	1	130	115	120			
		3.0	HB	3	0	130	115	120			
		6.0	HB	1	0	130	115	120			
S600F20	ALL	0.75	-	-	-	130	115	120	0	5	2
		1.5	HB	3	1	130	115	120			
		3.0	HB	3	0	130	115	120			
		6.0	HB	1	0	130	115	120			
S620F20 (f1)	ALL	0.75	-	-	-	130	115	120	2	6	2
		1.5	HB	3	1	130	115	120			
		3.0	HB	3	1	130	115	120			
		6.0	HB	2	1	130	115	120			
Polybutylene Terephthalate (PBT), "CRASTIN", furnished as pellets.											
CE2402	NC	0.8	V-0	4	0	130	130	130			1
		1.5	V-0	3	0	130	130	130			
		3.0	V-0	2	0	130	130	130			
Polybutylene Terephthalate (PBT), "Crastin", furnished as pellets.											
HR5330HF	NC, BK	0.75	HB	-	-	75	75	75			
LW617	NC, BK	0.75	HB	-	-	75	75	75			
S600F40	ALL	0.75	-	-	-	130	115	120	0	5	2
		1.5	HB	3	1	130	115	120			

		3.0	HB	3	0	130	115	120			
		6.0	HB	1	0	130	115	120			
Polybutylene Terephthalate (PBT), "CRASTIN", furnished as pellets.											
ST820	NC	0.8	HB	-	-	75	75	75			
T835FRUV	NC	0.8	V-0	4	0	130	130	130			1
		1.5	V-0	3	0	130	130	130			
		3.0	V-0	2	0	130	130	130			
T842FRX	NC	0.75	V-0	3	0	75	75	75	2	5	
		1.5	V-0	2	0	75	75	75			
		3.0	V-0	1	0	75	75	75			
Polybutylene Terephthalate (PBT), glass reinforced, furnished as pellets.											
CE15315(+)	ALL	0.71	V-0	3	2	130	110	130	3	6	2
		1.5	V-0	2	1	130	110	130			
		3.0	V-0	2	0	130	120	130			
CE15330(+)	ALL	0.71	V-0	3	1	140	120	140	4	6	3
		1.5	V-0	2	1	140	130	140			
		3.0	V-0	0	1	140	130	140			
Polybutylene Terephthalate (PBT), furnished as pellets.											
SK692FR	NC, BK	0.75	V-0	3	0	75	75	75	3	5	3
		1.5	V-0	2	0	75	75	75			
		3.0	V-0	2	0	75	75	75			
SK695FR	NC, BK	0.75	V-0	3	0	75	75	75	3	5	3
		1.5	V-0	3	0	75	75	75			
		3.0	V-0	2	0	75	75	75			
Polybutylene/Polyethylene Terephthalate (PBT/PET), "G-PET", furnished as pellets.											
GP-70(h)(g)	ALL	0.83	HB	-	-	75	75	75			
GP-7000(g)	ALL	0.83	HB	-	-	75	75	75			
GPN-7315(g)	ALL	0.84	V-0	-	-	75	75	75			
GPN-7330(g)	ALL	0.84	V-0	-	-	75	75	75			
Polybutylene/Polyethylene Terephthalate (PBT/PET), glass reinforced, flame retardant, "Rynite", furnished as pellets.											
RE19055	BK	0.75	V-0	-	-	75	75	75			
Polycarbonate (PC), furnished as pellets, powder.											
L-1250Y (f2)	ALL	0.40	V-2	4	3	80	80	80	4	5	2
		0.84	V-2	4	3	80	80	80			
		1.5	HB	4	0	125	115	125			
		3.0	HB	1	0	125	115	125			
		6.0	HB	1	0	125	115	125			
LV 11 (f2)	ALL	0.40	V-2	4	3	80	80	80	4	5	2
		0.75	V-2	3	1	80	80	80			
		1.5	V-2	3	1	125	115	125			
		1.9	HB	3	1	125	115	125			
		3.0	HB	2	1	125	115	125			
		6.0	HB	1	1	125	115	125			
LV 11 UV (f1)	ALL	0.40	V-2	4	3	80	80	80	4	5	2
		0.75	V-2	3	1	80	80	80			
		1.5	V-2	3	1	125	115	125			

		1.9	HB	3	1	125	115	125			
		3.0	HB	2	1	125	115	125			
		6.0	HB	1	1	125	115	125			
ULV 20 (f2)	ALL	0.40	V-2	4	3	80	80	80	4	5	2
		0.75	V-2	3	1	80	80	80			
		1.5	V-2	3	1	125	115	125			
		1.9	HB	3	1	125	115	125			
		3.0	HB	2	1	125	115	125			
		6.0	HB	1	1	125	115	125			
Polyethylene Terephthalate (PET), glass reinforced, toughened, "G-PET", furnished as pellets.											
408	ALL	0.75	HB	1	2	140	140	140	0	6	2
		1.5	HB	1	2	140	140	140			
		3.0	HB	0	2	140	140	140			
Polyethylene Terephthalate (PET), "G-PET", furnished as pellets.											
GP-10(h)(g)	ALL	0.81	HB	-	-	75	75	75			
GP-1000(g)	ALL	0.81	HB	-	-	75	75	75			
GPL-1010	ALL	0.84	HB	-	-	75	75	75			
GPL-1020	ALL	0.84	HB	-	-	75	75	75			
GPL-2010(g)	ALL	0.75	HB	-	-	75	75	75			
GPL-2030NB	BK	0.85	HB	-	-	75	75	75			
GPN-12(j)(g)	ALL	1.6	V-0	-	-	75	75	75			
GPN-1230(g)	BK	1.5	V-0, 5VA	-	-	75	75	75			
	ALL	1.6	V-0	-	-	75	75	75			
GPN-1330(g)	ALL	0.75	V-0	2	0	130	125	120	0	6	3
		1.5	V-0	0	0	130	125	120			
		1.6	V-0, 5VA	0	0	130	125	120			
		3.0	V-0, 5VA	0	0	130	125	125			
GPN-20(k)(g)	ALL	1.5	V-0	-	-	75	75	75			
GPN-2015(g)	ALL	1.5	V-0	-	-	75	75	75			
GPN-2030(g)	ALL	1.5	V-0	-	-	75	75	75			
SA-1325P	NC	0.26-0.35	VTM-2	-	-	75	75	75			
Polyethylene Terephthalate (PET), 15% glass reinforced, flame retardant, "Rynite", furnished as pellets.											
FR515(f1)	BK	0.86	V-0	0	0	140	140	140	3	7	3
		3.0	V-0	0	1	140	140	140			
Polyethylene Terephthalate (PET), encapsulation grades, "Rynite", furnished as pellets.											
815ER	ALL	0.81	HB	3	1	140	120	140	2	6	2
		1.5	HB	2	1	140	120	140			
		3.0	HB	0	1	140	120	140			
830ER	NC, BK	0.85	HB	2	1	140	140	140	2		3
		1.5	HB	1	1	140	140	140			
		3.0	HB	0	1	140	140	140			
FR815ER	ALL	0.86	V-0	0	0	140	140	140	3	7	3
	NC, BK	1.5	5VA	0	0	140	140	140			
	ALL	3.0	V-0	0	1	140	140	140			
FR830ER(f1)	NC, BK	0.35	V-0	3	1	-	-	-	1	6	2
	ALL	0.81	V-0	2	1	150	150	150			

	NC, BK	1.5	V-0, 5VA	0	1	150	150	150			
	ALL	2.0	V-0, 5VA	0	1	150	150	150			
		3.0	V-0, 5VA	0	1	150	150	150			
Polyethylene Terephthalate (PET), Flame Retardant, Glass Reinforced, "RYNITE", furnished as pellets.											
GW520CS	BK	0.75-0.9	V-2	0	0	140	140	140			2
	WT	0.75-1.7	V-2	0	0	140	140	140			
	NC, RD	0.75	V-2	0	0	140	140	140			
		1.5	V-2	0	0	140	140	140			
		3.0	V-2	0	0	140	140	140			
Polyethylene Terephthalate (PET), flame retardant, glass reinforced, color stable, "Rynite", furnished as pellets.											
FR515CS	ALL	1.5	V-0	-	-	140	140	140			
		2.5	V-0, 5VA	-	-	140	140	140			
FR530CS	WT	1.5	V-0	-	-	75	75	75			
		3.0	V-0	-	-	75	75	75			
Polyethylene Terephthalate (PET), glass reinforced, "Rynite", furnished as pellets.											
520(f1)	NC, GY, BK	0.75	HB	3	1	140	140	140	2	6	3
		1.5	HB	1	2	140	140	140			
		3.0	HB	0	1	140	140	140			
530 (f1) (+) , 530L (f1) (+)											
	ALL	0.81	HB	2	1	140	140	140	2	5	2
		1.5	HB	1	1	140	140	140			
		2.0	HB	1	1	140	140	140			
		3.0	HB	0	1	140	140	140			
		6.0	HB	0	1	140	140	140			
530HTE	NC, BK	0.85	HB	2	1	140	140	140	2		3
		1.5	HB	1	1	140	140	140			
		3.0	HB	0	1	140	140	140			
531F	ALL	0.81	HB	2	1	75	75	75	2	5	2
		1.5	HB	1	1	75	75	75			
		3.0	HB	0	1	75	75	75			
		6.0	HB	0	1	75	75	75			
545(f1)	ALL	0.75	HB	2	1	140	140	140	1	5	2
		1.5	HB	1	1	140	140	140			
		3.0	HB	0	1	140	140	140			
555	ALL	0.75	HB	2	1	140	140	140	1	5	3
		1.5	HB	1	1	140	140	140			
		3.0	HB	0	1	140	140	140			
RE5220	NC, BK	0.85	HB	2	1	140	140	140	2		3
		1.5	HB	1	1	140	140	140			
		3.0	HB	0	1	140	140	140			
RE5265	BK	0.81	HB	-	-	75	75	75			
RE5265A	BK	0.81	HB	-	-	75	75	75			
RE5295	BK	0.81	HB	2	3	75	75	75	0		3
		1.5	HB	2	3	75	75	75			
		3.0	HB	0	3	75	75	75			
Polyethylene Terephthalate (PET), glass reinforced, color stable, "Rynite", furnished as pellets.											

515CS	ALL	0.75	HB	-	-	75	75	75			
530CS	ALL	0.75	HB	1	0	140	140	140	0		2
		1.5	HB	1	0	140	140	140			
		3.0	HB	0	0	140	140	140			
RE5210P	WT	0.82	HB	-	-	75	75	75			
RE5211(f1)	WT	0.75	HB	1	0	140	140	140	0		2
		1.5	HB	1	0	140	140	140			
		3.0	HB	0	0	140	140	140			
RE5211(f2)	ALL	0.75	HB	1	0	140	140	140	0		2
		1.5	HB	1	0	140	140	140			
		3.0	HB	0	0	140	140	140			
RE5213	ALL	0.75	HB	-	-	75	75	75			
Polyethylene Terephthalate (PET), glass reinforced, flame retardant, "Rynite", furnished as pellets.											
FR330	ALL	0.81	V-0	3	1	140	140	140	3	6	3
	NC, BK	1.5	5VA	0	1	140	140	140			
	ALL	3.0	V-0	0	1	140	140	140			
FR515	ALL	0.86	V-0	0	0	140	140	140	1	7	3
	NC, BK	1.5	5VA	0	0	140	140	140			
	ALL	3.0	V-0	0	1	140	140	140			
FR530(l)(+)(f1), FR530L(l)(+)(f1)											
	NC, BK	0.35	V-0	3	1	155	-	-	1	6	2
	ALL	0.75	V-0	2	1	155	155	155			
	NC	0.9	V-0, 5VA	2	1	155	155	155			
	NC, BK	1.5	V-0, 5VA	0	1	155	155	155			
	ALL	2.0	V-0, 5VA	0	1	155	155	155			
		3.0	V-0, 5VA	0	1	155	155	155			
FR543	NC, BK	0.81	V-0	0	1	155	155	155	1	5	2
		1.5	V-0, 5VA	0	1	155	155	155			
		3.0	V-0, 5VA	0	1	155	155	155			
Polyethylene Terephthalate (PET), glass reinforced, flame retardant, "RYNITE", furnished as pellets.											
GW525CS	ALL	0.8	HB	1	2	140	140	140	4		
		1.5	HB	1	1	140	140	140			
		3.0	HB	0	0	140	140	140			
	WT	3.0	V-2	0	0	140	140	140			
Polyethylene Terephthalate (PET), glass reinforced, flame retardant, "Rynite", furnished as pellets.											
RE19045	NC, BK	0.75	V-0	2	1	75	75	75			3
		1.5	V-0	0	1	75	75	75			
		3.0	V-0	0	0	75	75	75			
RE19060	BK	0.75	V-0	2	1	155	155	155			3
		1.5	V-0	0	1	155	155	155			
		3.0	V-0	0	0	155	155	155			
RE19099	NC, BK	0.75	V-0	2	0	140	140	140			3
		1.5	V-0	0	0	140	140	140			
		3.0	V-0	0	0	140	140	140			
Polyethylene Terephthalate (PET), glass reinforced, mineral reinforced, "Rynite", furnished as pellets.											
935 (f1)	NC, BK	0.75	HB	2	1	140	140	140	1	5	2

		1.5	HB	1	1	140	140	140			
		3.0	HB	0	1	140	140	140			
940	BK	0.75	HB	-	-	75	75	75			
RE5131	NC, BK	0.75	HB	3	3	140	140	140	1	5	2
		1.5	HB	1	3	140	140	140			
		3.0	HB	0	4	140	140	140			
Polyethylene Terephthalate (PET), glass reinforced, mineral reinforced, flame retardant, "Rynite", furnished as pellets.											
FR943	NC, GY, BK	0.35	V-0	-	-	65	65	65	1	6	2
		0.81	V-0	2	4	155	155	155			
		1.5	V-0, 5VA	2	4	155	155	155			
		3.0	V-0, 5VA	0	4	155	155	155			
FR945	ALL	0.81	V-0	2	2	150	150	150	1	5	2
		1.5	V-0, 5VA	0	2	150	150	150			
		3.0	V-0, 5VA	0	1	150	150	150			
FR946	NC, BK	0.81	V-0	0	3	150	140	140	1	6	3
	GN, GY	1.5	V-0	0	3	150	150	150			
	BL	3.0	V-0	0	3	150	150	150			
	NC, BK	3.0	5VA	0	3	150	150	150			
RE19008	ALL	0.75	V-0	2	3	140	140	140	2	5	3
		1.5	V-0	1	1	140	140	140			
		3.0	V-0	0	1	140	140	140			
RE19011	BK	0.75	V-0	2	3	155	155	155	0	5	2
		1.5	V-0, 5VA	0	1	155	155	155			
		3.0	V-0, 5VA	0	2	155	155	155			
RE19012	BK	0.75	V-0	-	-	155	155	155			
RE19020	BK	0.75	V-0	2	3	155	155	155	0	5	2
		1.5	V-0, 5VA	0	1	155	155	155			
		3.0	V-0, 5VA	0	2	155	155	155			
RE19051	NC, BK	0.81	V-0	0	3	155	155	155	1		3
	ALL	1.5	V-0, 5VA	1	3	155	155	155			
		3.0	V-0, 5VA	1	2	155	155	155			
RE9078	NC, BK	0.81	V-0	0	3	155	155	155	1		3
	ALL	1.5	V-0, 5VA	1	3	155	155	155			
		3.0	V-0, 5VA	1	2	155	155	155			
RE9097	NC	0.81	V-0	0	3	75	75	75	1		2
		1.5	V-0	0	3	75	75	75			
		3.0	V-0	0	3	75	75	75			
Polyethylene Terephthalate (PET), glass reinforced, toughened, "Rynite", furnished as pellets.											
415HP	ALL	0.75	HB	3	1	140	120	140	2	6	2
		1.5	HB	2	1	140	120	140			
		3.0	HB	0	1	140	120	140			
430HP	NC, BK	0.89	HB	2	3	140	120	140	0	5	2
		1.5	HB	1	3	140	120	140			
		3.0	HB	0	3	140	120	140			
SST35	NC, BK	0.75	HB	3	0	150	150	150	3		1
		1.5	HB	2	0	150	150	150			

		3.0	HB	1	0	150	150	150			
Polyethylene Terephthalate (PET), glass reinforced,flame retardant, "RYNITE", furnished as pellets.											
FR531	NC, BK, RD	0.75	V-0	0	0	155	155	155	0		2
		1.5	V-0	0	0	155	155	155			
	NC	2.0	5VA	0	0	155	155	155			
	NC, BK, RD	3.0	V-0	0	3	155	155	155			
Polyethylene Terephthalate (PET), glass reinforced,flame retardant., "RYNITE", furnished as pellets.											
RE19050	BK	0.75	V-0	-	-	75	75	75			
Polyethylene Terephthalate (PET), is a mineral/glass reinforced material., "RYNITE", furnished as pellets.											
625FD	BK	0.75	HB	-	-	75	75	75			
Polyethylene Terephthalate (PET), "Rynite", furnished as pellets.											
936CS	ALL	0.75	HB	-	-	75	75	75			
RE19041	BK	1.5	V-0	-	-	75	75	75			
		2.0	V-0, 5VA	-	-	75	75	75			
		3.0	V-0, 5VA	-	-	75	75	75			
RE5329	ALL	0.75	HB	-	-	75	75	75			
RXJ9095	BK	0.8	V-0	1	0	75	75	75			
		2.5	V-0, 5VA	1	0	75	75	75			
		3.0	V-0, 5VA	0	0	75	75	75			
Polyethylene Terephthalate (PET), "Rynite".											
RE19032	BK	1.5	V-0	-	-	75	75	75			
		2.0	V-0, 5VA	-	-	75	75	75			
		3.0	V-0	-	-	75	75	75			
Polyethylene Terephthalate (PET), glass reinforced, flame retardant, furnished as pellets.											
FC01	NC, BK	0.75	V-0	2	0	140	140	140			3
		1.5	V-0	0	0	140	140	140			
		3.0	V-0	0	0	140	140	140			
Polyethylene Terephthalate (PET), glass reinforced, mineral reinforced, flame retardant, furnished as pellets.											
FC02	NC, BK	0.81	V-0	0	3	155	155	155	1		3
	ALL	1.5	V-0, 5VA	1	3	155	155	155			
		3.0	V-0, 5VA	1	2	155	155	155			
FC51	ALL	1.5	V-1	1	3	150	150	150	1		3
		3.0	V-1	1	2	150	150	150			
Polyimide (PI), POLYIMIDE WITH 15% GRAPHITE BYNWEIGHT, "Vespel", furnished as bars, tubes or finished parts.											
SP-21	NC, BK	0.75	V-0, 5VA	-	-	130	130	130	4	6	3
		1.5	V-0, 5VA	0	3	130	130	130			
		3.0	V-0, 5VA	0	2	130	130	130			
Polyimide (PI), polyimide with 40% graphite, by weight, "Vespel", furnished as bars, tubes or finished parts.											
SP-22	NC, BK	0.75	V-0, 5VA	-	-	130	130	130	0	7	2
		1.6	V-0, 5VA	0	1	130	130	130			
		3.0	V-0, 5VA	0	1	130	130	130			
Polyimide (PI), unfilled polyimide base resin, "Vespel", furnished as bars,tubes or finished parts.											
SP-1	NC, TN	0.75	V-0, 5VA	-	-	130	130	130	4	4	3
		1.7	V-0, 5VA	0	0	130	130	130			
		3.0	V-0, 5VA	0	0	130	130	130			
Polyimide (PI), "Vespel", furnished as bars, tubes or finished parts.											

SCP-5000	NC	0.75	V-0, 5VA	0	0	50	50	50	4	6	3
		3.0	V-0, 5VA	0	0	50	50	50			
SP-202	NC	0.75	V-0, 5VA	0	0	50	50	50			
		3.0	V-0, 5VA	0	0	50	50	50			
Polyimide (PI), "Vespel", furnished as finished parts.											
TP-8054	NC	0.75	V-0	-	-	50	50	50			
Polyimide (PI), POLYIMIDE WITH 15 % GRAPHITE, LUBRICATED, "Vespel ", furnished as bars, tubes or finished parts.											
SP-215	NC	0.75	V-0	-	-	50	50	50			
Polyimide (PI), POLYIMIDE WITH 15% GRAPHITE, AND 10%TEFLON BY WEIGHT, "Vespel ", furnished as bars, tubes or finished parts.											
SP-211	NC, BK	0.75	V-0, 5VA	-	-	130	130	130	0	6	3
		1.5	V-0, 5VA	0	3	130	130	130			
		3.0	V-0, 5VA	0	2	130	130	130			
Polyimide (PI), POLYIMIDE WITH 40% GRAPHITE AND 15% FLUOROCARBON, "Vespel ", furnished as bars, tubes or finished parts.											
SP-221	NC	0.75	V-0	-	-	50	50	50			
Polyimide (PI), UNFILLED POLYIMIDE BASE RESIN, Lubricated, "Vespel ", furnished as bars tubes or finished parts.											
SP-101	NC	0.75	V-0	-	-	50	50	50			
Polyimide (PI), "Vespel ", furnished as pellets or molded parts or shapes.											
TP-8311	NC	0.75	V-0	-	-	50	50	50			
		1.5	V-0	-	-	50	50	50			
		3.0	V-0	-	-	50	50	50			
Polyphthalamide 6T, "Zytel", furnished as pellets.											
HTNFR52G20NH	ALL	0.4	V-0	-	-	65	65	65			
		0.75	V-0	-	-	65	65	65			
		1.5	V-0	-	-	65	65	65			
		3.0	V-0	-	-	65	65	65			
Thermoplastic Elastomer (TPE), elastomer-ether-ester, "Hytrel", furnished as pellets.											
3078	NC	1.5	HB	4	0	50	50	50	0		0
		3.0	HB	3	0	50	50	50			
4056	NC	1.5	HB	-	-	50	50	50			
4059FG	NC	0.79	-	4	0	50	50	50	0	6	0
		1.5	HB	3	0	50	50	50			
		3.0	HB	2	0	50	50	50			
4069	NC	1.5	HB	4	0	50	50	50	0		0
		3.0	HB	4	0	50	50	50			
5526	NC	1.5	HB	3	0	85	85	75	0	5	0
		3.0	HB	2	0	85	85	80			
5555HS	NC	0.7	-	-	-	90	50	50	0	5	0
		1.5	HB	4	0	90	85	85			
		3.0	HB	3	0	90	85	85			
5556, 4556	NC	0.70	-	-	-	85	50	50	0	5	0
		1.5	HB	3	0	85	85	75			
		3.0	HB	2	0	85	85	80			
6356	NC	1.5	HB	3	0	85	85	75	0	5	0
		3.17	HB	3	0	85	85	80			
6358	NC	1.5	HB	3	0	85	85	75	0	5	0

		3.17	HB	3	0	85	85	80			
7246	NC	1.5	HB	-	-	85	85	75			
7246	NC	1.5	HB	-	-	85	85	75			
8238	NC	0.91	HB	-	-	50	50	50	0	5	0
		1.5	HB	4	0	90	85	85			
		3.0	HB	3	0	90	85	85			
G3548	NC	0.79	-	4	0	50	50	50	0	6	0
		1.5	HB	3	0	50	50	50			
		3.0	HB	2	0	50	50	50			
G3548L	NC	1.5	HB	4	0	50	50	50	0		0
		3.0	HB	-	-	50	50	50			
G4074	NC	0.71	-	-	-	90	50	50	0	5	0
		1.5	HB	4	0	90	85	85			
		3.0	HB	3	0	90	85	85			
G4078	NC	0.79	-	4	0	50	50	50	0	6	0
		1.5	HB	3	0	50	50	50			
		3.0	HB	2	0	50	50	50			
G4078W	NC	1.5	HB	4	0	50	50	50	0	6	0
		3.0	HB	3	0	50	50	50			
G4774	NC	0.69	-	4	0	50	50	50	0	6	0
		1.5	HB	3	0	50	50	50			
		3.0	HB	2	0	50	50	50			
G4778	NC	1.5	HB	3	0	50	50	50	0	6	0
		3.0	HB	2	0	50	50	50			
G5544	NC	0.79	-	4	0	50	50	50	0	5	0
		1.5	HB	3	0	50	50	50			
		3.0	HB	3	0	50	50	50			
HTR5612	NC, BK	1.5	HB	4	0	50	50	50	0	6	0
		3.0	HB	2	0	50	50	50			
HTR8068	BK	1.5	V-1	3	0	50	50	50	2	6	1
	NC	1.5	V-0	3	0	50	50	50			
	BK	3.0	V-0	1	0	50	50	50			
Thermoplastic Elastomer (TPE), "Hytrel", furnished as pellets.											
8303	NC	0.75	HB	4	0	50	50	50			0
		1.5	HB	4	0	50	50	50			
		3.0	HB	2	0	50	50	50			
HTR8303	NC	0.75	HB	4	0	50	50	50			0
		1.5	HB	4	0	50	50	50			
		3.0	HB	2	0	50	50	50			
Thermoplastic Elastomer Vulcanizate (TPV), "ETPV", furnished as pellets.											
60A01L	NC	0.75	HB	-	-	50	50	50			
90A01	NC	0.75	HB	-	-	50	50	50			
Modified Poly (1, 4-cyclohexylenedimethylene terephthalate), "THERMX", furnished as pellets.											
FG15G	ALL	1.5	HB	2	0	-	-	-	1	5	0
		3.0	HB	1	0	-	-	-			
Poly (1, 4-cyclohexylenedimethylene terephthalate), "THERMX", furnished as pellets.											

CG033	NC, BK	0.8	HB	4	0	50	50	50	0		1
		1.5	HB	1	0	50	50	50			
		3.0	HB	0	0	50	50	50			
CG907	ALL	0.75	V-2	0	0	150	150	150	4	6	2
		1.5	V-0	0	0	150	150	150			
		3.0	V-0,5VA	0	0	150	150	150			
CG907R(+)	ALL	1.5	V-0	0	4	140	140	130	4	5	2
		3.0	V-0	0	4	140	140	130			
CG923	ALL	1.5	V-0	0	1	150	-	130	3	6	2
		3.0	V-0	0	1	150	-	130			
CG933	ALL	0.79	V-2	0	1	-	-	-	3	6	1
		1.5	V-0	0	1	150	-	150			
		3.0	V-0	0	1	150	-	150			
CG933R(+)	ALL	1.5	V-0	-	-	150	-	150			
CG943	ALL	1.5	V-0	0	1	150	-	140	3	6	2
		3.0	V-0	0	1	150	-	140			
CG943R(+)	ALL	1.5	V-0	-	-	150	-	150			
CGT33	NC, BK	1.5	HB	-	-	50	50	50			0
		3.0	HB	-	-	50	50	50			
TE3002	BK	0.79	V-0	0	1	150	-	140	3	6	1
	ALL	1.5	V-0	0	1	150	-	150			
		3.0	V-0	0	1	150	-	150			

(%) - Virgin and regrind up to 60% by weight inclusive have the same basic material characteristics.

(+) - Virgin and regrind up to 50% by weight inclusive, have the same basic material characteristics.

(a) - Minlon is designated Zytel in Japan.

(b) - Virgin and regrind up to 50% by weight inclusive have the same basic material characteristics for black only.

(c) - Virgin and regrind up to 50% by weight inclusive have the same flammability characteristics.

(d) - Virgin and regrind up to 100% by weight have the same basic material characteristics.

(e) - Virgin and regrind up to 50% by weight inclusive have the same basic material characteristics for black and white only.

(f1) - Suitable for outdoor use with respect to exposure to Ultraviolet Light, Water Exposure and Immersion in accordance with UL 746C.

(f2) - Subjected to one or more of the following tests: Ultraviolet Light, Water Exposure or Immersion in accordance with UL 746C, where the acceptability for outdoor use is to be determined by UL.

(f3) - Refer also to guides FDNP-2 and IQDY-2 for additional information regarding suitability for use in NSF 61 and NSF 51 applications.

(g) - Represents a letter (except A or J) which may indicate color.

(h) - Represents two digits 01 thru 49 denoting the content of glass fiber in weight percent.

(j) - Represents two digits 11 thru 29 denoting the content of glass fiber in weight percent.

(k) - Represents two digits 16 thru 29 denoting the content of glass fiber in weight percent.

(l) - Recognized ground insulation component at 0.4 mm with MW79 in UL1446 Class 155 electrical insulation system designated R201N (File E69939).

(m) - Virgin and regrind up to 50% have the same basic characteristics except for the Electrical RTI rating below the 0.75 mm thickness.

(n) - Virgin and regrind up to 50% by weight inclusive have the same basic material characteristics except for the resistance to ignition property and the Electrical RTI value at thicknesses less than 0.81 mm.

(R) - Virgin and regrind up to 50% by weight inclusive have the same flammability characteristics for black only.

(r1) - Virgin and regrind up to 100% by weight inclusive have the same flammability characteristics in the natural color.

(r2) - Virgin and regrind up to 100% by weight inclusive have the same flammability characteristics.

(r3) - Virgin and regrind material up to 50% by weight inclusive had the same basic characteristics down to the minimum thickness of 0.4 mm.

(r4) - Virgin and regrind up to 50% by weight inclusive have the same basic material characteristics down to the minimum thickness of 1.5 mm.

(r5) - Virgin and regrind up to 50% by weight inclusive have the same flammability and distortion under load characteristics.

(r6) - Virgin and regrind up to 50% by weight inclusive have the same flammability characteristics in the natural and black colors only.

(r8) - Virgin and regrind up to 100% by weight inclusive have the same flammability characteristics in the natural and black colors only.

(v) - Virgin and regrind from 26% to 100% by weight incl. have the same basic characteristics with respect to TI, TS, HDT and flammability.

NOTE - (1) Material designations that are color pigmented may be followed by suffix letters and numbers. (2) Material designations may be prefixed by "ZYT" or "MIN" or "ZEN" or "DEL" or "CRA" or "RYN".

Marking: Company name or tradename "CRASTIN" , "DELRIN" , "MINLON" , "RYNITE" , "Thermx" , "ZENITE" , "ZYTEL" and material designation on container, wrapper or finished part.

Last Updated on 2009-05-29

Questions? Notice of Disclaimer Page Top

ONLINE CERTIFICATIONS DIRECTORY

QMFZ2.E48285
Plastics - Component

Additional information regarding this certification can be found in UL's iQ Family of Databases (iq.ul.com).

NEW -- for additional information concerning the individual material, click on the material designation.

Page Bottom

Plastics - Component

See General Information for Plastics - Component

ASAHI KASEI CHEMICALS CORP E48285
HIBIYA-MITSUI BLDG
1-2 YURAKUCHO 1-CHOME
CHIYODA-KU
TOKYO, 100-0006 JAPAN

		Min.		H	H	R T I			H V	D 4	C
		Thk	Flame	W	A	Elec	Mech		T	9	T
Material Dsg	Color	mm	Class	I	I		Imp	Str	R	5	I
Acetal "Polyoxymethylene" (POM), "Tenac", furnished as pellets.											
2010	ALL	0.80	HB	-	-	105	85	85	0	4	0
		1.5	HB	4	0	105	90	85			
		3.0	HB	4	0	105	90	85			
		6.0	HB	4	0	105	90	85			
3010	ALL	1.5	HB	4	0	105	90	85	0	4	0
		3.0	HB	4	0	105	90	85			
		6.0	HB	4	0	105	90	85			
4010	ALL	1.5	HB	4	0	105	90	85	0	4	0
		3.0	HB	4	0	105	90	85			
		6.0	HB	4	0	105	90	85			
4012	ALL	0.84	HB	4	0	50	50	50	0		0
		1.5	HB	4	0	50	50	50			
		3.0	HB	3	0	50	50	50			
4014	ALL	1.5	HB	4	0	50	50	50	0	4	0
		3.0	HB	4	0	50	50	50			
4015	ALL	0.81	HB	4	0	50	50	50	0	3	0
		1.5	HB	4	0	50	50	50			
		3.0	HB	3	0	50	50	50			
4050	ALL	0.75	HB	-	-	50	50	50			
4060	ALL	0.75	HB	-	-	50	50	50			
5010	ALL	1.5	HB	4	0	105	90	85	0	4	0
		3.0	HB	4	0	105	90	85			
		6.0	HB	4	0	105	90	85			
5010(i)	ALL	1.5	HB	-	-	-	-	-			
5010(r2)	ALL	1.5	HB	4	0	50	50	50	0	4	0
		3.0	HB	4	0	50	50	50			
		6.0	HB	4	0	50	50	50			

5012	ALL	0.84	HB	4	0	50	50	50	0		0
		1.5	HB	4	0	50	50	50			
		3.0	HB	3	0	50	50	50			
5015	ALL	0.81	HB	4	0	50	50	50	0	3	0
		1.5	HB	4	0	50	50	50			
		3.0	HB	3	0	50	50	50			
5050	ALL	0.75	HB	-	-	105	85	85			
		1.5	HB	4	0	105	85	85			
		2.8	HB	4	0	105	85	85			
7010	ALL	0.71	HB	-	-	105	85	85		4	0
		1.5	HB	4	0	105	90	85			
		2.8	HB	3	0	105	90	85			
		3.0	HB	3	0	105	90	85			
7050	ALL	0.75	HB	-	-	105	85	85	0	4	0
		1.5	HB	4	0	105	90	85			
		2.8	HB	4	0	105	90	85			
		3.0	HB	4	0	105	90	85			
7054	ALL	0.75	HB	4	0	50	50	50			0
		1.5	HB	4	0	50	50	50			
		3.0	HB	3	0	50	50	50			
9054	ALL	0.75	HB	-	-	50	50	50			
EF500	NC	1.5	HB	4	0	50	50	50			
		3.0	HB	3	0	50	50	50			
FA405	ALL	0.74	HB	4	0	50	50	50	0	5	0
		1.5	HB	4	0	50	50	50			
		3.0	HB	4	0	50	50	50			
FS410	ALL	0.75	HB	4	0	50	50	50	0	5	0
		1.5	HB	3	0	50	50	50			
		3.0	HB	3	0	50	50	50			
GA510	ALL	0.73	HB	-	-	50	50	50			
GA520	NC	0.71	HB	-	-	50	50	50			
	ALL	1.5	HB	4	0	50	50	50			
		3.0	HB	4	0	50	50	50			
GN705	ALL	0.75	HB	-	-	50	50	50			
GT525	ALL	0.75	HB	4	0	50	50	50	0	5	0
		1.5	HB	4	0	50	50	50			
		3.0	HB	4	0	50	50	50			
LA500	ALL	1.5	HB	4	0	50	50	50	0	5	0
		3.0	HB	4	0	50	50	50			
		6.0	HB	4	0	50	50	50			
LA501	ALL	0.75	HB	5	-	95	90	-	0	5	0
		1.5	HB	4	0	95	90	-			
		3.0	HB	4	0	95	90	-			
LA502	ALL	1.5	HB	-	-	50	50	50			
LA510	ALL	1.5	HB	4	0	50	50	50	0	5	0
		3.0	HB	4	0	50	50	50			

		6.0	HB	4	0	50	50	50			
LA520	ALL	1.5	HB	-	-	50	50	50			
LA531	ALL	0.75	HB	-	-	50	50	50			
LA532	ALL	0.75	HB	-	-	50	50	50			
LA541	ALL	0.75	HB	-	-	50	50	50			
LA542	ALL	0.75	HB	-	-	50	50	50			
LA543	ALL	0.70	HB	-	-	50	50	50			
LA731	ALL	0.75	HB	-	-	50	50	50			
LM511(m)	ALL	0.70	HB	-	-	50	50	50			
LM513	ALL	0.70	HB	-	-	50	50	50			
LP401	ALL	0.75	HB	-	-	50	50	50			
LP402	ALL	0.75	HB	-	-	50	50	50			
LS601	ALL	0.70	HB	-	-	50	50	50			
LS700	ALL	0.38	HB	-	-	50	50	50			
LS701	ALL	0.70	HB	-	-	50	50	50			
LT200	NC, BK	1.5	HB	4	0	50	50	50	0		0
		3.0	HB	4	0	50	50	50			
LT802	ALL	0.75	HB	-	-	50	50	50			
LT805, LT804	ALL	0.75	HB	5	0	50	50	50	0	5	0
		1.5	HB	4	0	50	50	50			
		3.0	HB	4	0	50	50	50			
SH210	ALL	0.75	HB	-	-	50	50	50			
SH310	ALL	0.75	HB	-	-	50	50	50			
SH410	ALL	0.75	HB	-	-	50	50	50			
SH510	ALL	0.75	HB	-	-	50	50	50			
SH611	ALL	0.75	HB	-	-	50	50	50			
SH710	ALL	0.75	HB	-	-	50	50	50			
Acetal "Polyoxymethylene" (POM), copolymer, "Tenac-C", furnished as pellets.											
3513	ALL	0.75	HB	-	-	50	50	50			
		3.0	HB	-	-	50	50	50			
Acetal "Polyoxymethylene" (POM), "Tenac-C", furnished as pellets.											
3510, 3530	ALL	0.81	HB	4	0	115	90	90	0	3	0
		1.5	HB	3	0	115	90	90			
		3.0	HB	2	0	115	90	95			
3531	ALL	0.75	HB	-	-	50	50	50			
4510	ALL	0.81	HB	4	1	115	90	90	0	4	0
		1.5	HB	4	0	115	90	90			
		3.0	HB	3	0	115	90	95			
4513	ALL	0.70	HB	-	-	50	50	50			
4520	ALL	0.75	HB	4	0	105	80	90	0	4	0
		1.5	HB	3	0	105	80	90			
		3.0	HB	3	0	105	85	90			
4520(i)	ALL	0.75	HB	-	-	50	50	50			
4540	ALL	0.75	HB	-	-	50	50	50			
4560	ALL	0.73	HB	-	-	50	50	50			
4590	ALL	0.75	HB	-	-	50	50	50			

5520	ALL	0.75	HB	4	0	105	80	90	0	4	0
		1.5	HB	4	0	105	80	90			
		3.0	HB	3	0	105	85	90			
5521	ALL	0.75	HB	-	-	50	50	50			
7510	ALL	0.81	HB	4	1	115	90	90	0	4	0
		1.5	HB	4	0	115	90	90			
		3.0	HB	3	0	115	90	95			
7511	ALL	0.75	HB	-	-	50	50	50			
7520	ALL	0.75	HB	4	0	105	80	90	0	4	0
		1.5	HB	4	0	105	80	90			
		3.0	HB	3	0	105	85	90			
7520(i)	ALL	0.75	HB	-	-	50	50	50			
7523	ALL	0.71	HB	-	-	50	50	50			
7554	ALL	0.75	HB	-	-	50	50	50			
8520	ALL	0.75	HB	-	-	50	50	50			
AG450	ALL	0.75	HB	-	-	50	50	50			
AG850	ALL	0.75	HB	-	-	50	50	50			
BC150	ALL	1.5	HB	-	-	50	50	50			
DS850	ALL	0.75	HB	-	-	50	50	50			
DS950	ALL	0.75	HB	-	-	50	50	50			
EC352	ALL	0.75	HB	-	-	50	50	50			
EF450	NC, BK	0.75	HB	-	-	50	50	50			
EF750	NC, BK	0.75	HB	4	0	50	50	50	4	7	5
		1.5	HB	4	0	50	50	50			
		3.0	HB	3	0	50	50	50			
EF751	NC, BK	0.75	HB	4	0	50	50	50	4	7	5
		1.5	HB	4	0	50	50	50			
		3.0	HB	3	0	50	50	50			
EX350	ALL	0.75	HB	-	-	50	50	50			
EX351	ALL	0.75	HB	-	-	50	50	50			
EX352	ALL	0.75	HB	-	-	50	50	50			
GN455	ALL	0.75	HB	-	-	-	-	-	0	4	0
		1.5	HB	4	0	105	95	100			
		3.0	HB	3	0	105	95	105			
GN755	ALL	0.75	HB	-	-	-	-	-	0	4	0
		1.5	HB	4	0	105	95	100			
		3.0	HB	3	0	105	95	105			
HC350	ALL	0.75	HB	-	-	50	50	50			
HC450(i)	ALL	0.75	HB	-	-	50	50	50			
HC460	ALL	0.75	HB	-	-	50	50	50			
HC490	ALL	0.75	HB	-	-	50	50	50			
HC750(i)	ALL	0.75	HB	-	-	50	50	50			
HC760	ALL	0.75	HB	-	-	50	50	50			
HD450	ALL	0.75	HB	-	-	50	50	50			
HD750	ALL	0.75	HB	-	-	50	50	50			
LC551	ALL	O.75	HB	-	-	50	50	50			

LC750(n)	ALL	0.75	HB	-	-	50	50	50			
LD755	ALL	0.71	HB	-	-	50	50	50			
LH755	ALL	0.71	HB	-	-	50	50	50			
LV450	ALL	0.75	HB	-	-	50	50	50			
LZ750	ALL	0.75	HB	-	-	50	50	50			
MT451	ALL	0.75	HB	-	-	50	50	50			
MT754	ALL	0.75	HB	4	0	50	50	50	0	4	0
		1.5	HB	3	0	50	50	50			
		3.0	HB	2	0	50	50	50			
MW752	ALL	0.75	HB	-	-	50	50	50			
NS556	ALL	0.75	HB	-	-	50	50	50			
RD450	ALL	0.75	HB	-	-	50	50	50			
		3.0	HB	-	-	50	50	50			
RD750	ALL	0.75	HB	-	-	50	50	50			
SA452	ALL	1.5	HB	-	-	50	50	50			
SA471	ALL	1.0	HB	-	-	50	50	50			
		3.0	HB	-	-	50	50	50			
SG452	ALL	1.5	HB	-	-	50	50	50			
SG454	ALL	1.5	HB	-	-	50	50	50			
SN456	ALL	0.75	HB	4	0	50	50	50	0	5	0
		1.5	HB	4	0	50	50	50			
		3.0	HB	2	0	50	50	50			
SR850	ALL	0.70	HB	-	-	50	50	50			
ST454	ALL	0.75	HB	-	-	50	50	50			
TFC64	NC, BK	0.75	HB	-	-	50	50	50			
TFC67N	NC	0.75	HB	-	-	50	50	50			
TFL64N	ALL	0.75	HB	-	-	50	50	50			
TFL67N	ALL	0.75	HB	-	-	50	50	50			
TK754	NC	0.74	HB	-	-	50	50	50			
TRT64N	ALL	0.75	HB	-	-	50	50	50			
TRT68N	ALL	0.75	HB	-	-	50	50	50			
Acetal Copolymer, "Tenac-C", furnished as pellets.											
CF452	NC	0.75	HB	-	-	50	50	50			
CF454	NC	0.75	HB	-	-	50	50	50			
HC550	ALL	0.75	HB	-	-	50	50	50			
		3.0	HB	-	-	50	50	50			
RD751	ALL	0.75	HB	-	-	50	50	50			
SA472	ALL	1.1	HB	-	-	50	50	50			
SA474	NC, RD, BK	0.75	HB	-	-	50	50	50			
	ALL	1.5	HB	-	-	50	50	50			
WS350	ALL	0.75	HB	-	-	50	50	50			
ZH450	ALL	0.75	HB	-	-	50	50	50			
ZH760	ALL	0.75	HB	-	-	50	50	50			
ZLD75	ALL	0.75	HB	-	-	50	50	50			
Polyamide 6/6 (PA6/6), "Leona", furnished as pellets.											
14G25	ALL	0.75	HB	3	0	140	65	65	0	6	1

		1.5	HB	3	0	140	125	140			
		3.0	HB	3	0	140	125	140			
14G30	ALL	0.75	HB	3	0	140	65	65	0	6	1
		1.5	HB	3	0	140	125	140			
		3.0	HB	3	0	140	125	140			
14G33	ALL	0.75	HB	3	0	140	65	65	0	6	1
		1.5	HB	3	0	140	125	140			
		3.0	HB	3	0	140	125	140			
14G50	ALL	0.75	HB	3	0	140	65	65	0	5	0
		1.5	HB	0	0	140	125	140			
		3.0	HB	0	0	140	125	140			
Polyamide 66 (PA66), "Leona", furnished as granular material.											
1300G(o)	ALL	0.71	HB	4	0	125	105	110	1	5	1
		1.5	HB	4	0	125	105	110			
		3.0	HB	4	0	125	110	120			
1302S	ALL	0.71	V-2	4	0	120	95	90	0	5	0
		1.5	V-2	3	0	120	95	90			
		3.0	V-2	3	0	120	95	100			
13G15	ALL	0.75	HB	4	0	125	110	115	0	5	0
		1.5	HB	3	0	125	110	120			
		3.0	HB	2	0	125	110	120			
13G23	ALL	0.75	HB	4	0	125	110	115	0	5	0
		1.5	HB	3	0	125	110	120			
		3.0	HB	2	0	125	110	120			
13G25	ALL	0.71	HB	4	0	125	110	115	1	5	0
		1.5	HB	3	0	125	110	120			
		3.0	HB	3	0	125	110	120			
13G30	ALL	0.71	HB	-	-	125	105	105	1	5	0
		0.75	HB	4	0	125	110	115			
		1.5	HB	3	0	125	110	120			
		3.0	HB	3	0	125	110	120			
13G33	ALL	0.71	HB	-	-	125	110	115	1	5	0
		1.5	HB	3	0	125	110	120			
		3.0	HB	3	0	125	110	120			
13G43	ALL	0.75	HB	4	0	110	110	115	1	5	0
		1.5	HB	2	0	110	110	120			
		3.0	HB	3	0	110	110	120			
1402F	ALL	0.71	V-2	4	0	130	105	105	0	6	1
		1.5	V-2	3	0	130	105	105			
		3.0	V-2	3	0	130	105	105			
1402G	ALL	0.71	HB	4	0	120	90	110	1	6	1
		1.5	HB	3	0	120	90	120			
		3.0	HB	0	0	120	100	125			
1402S	ALL	0.71	V-2	4	0	130	105	105	0	6	1
		1.5	V-2	3	0	130	105	105			
		3.0	V-2	3	0	130	105	105			

14G15	ALL	0.75	HB	4	0	130	110	115	0	6	1
		1.5	HB	3	0	130	110	120			
		3.0	HB	3	0	130	110	120			
14G23	ALL	0.75	HB	-	-	65	65	65			
14G43	ALL	0.75	HB	-	-	65	65	65			
FG101(g)	NC	0.71	V-1	0	0	105	-	-	1	7	2
		1.5	V-0	0	0	105	105	105			
	ALL	1.5	V-1	0	0	105	105	105			
		3.0	V-0	0	0	105	105	105			
FR200(k)(p)	NC	0.35	V-0	4	2	65	65	65	0	5	0
	ALL	0.71	V-0	3	0	105	65	65			
		1.5	V-0	3	0	105	65	65			
		3.0	V-0	2	0	105	65	65			
FR370(j)	ALL	0.38	V-0	5	1	95	-	95	0	5	0
		0.75	V-0	4	1	130	90	105			
		1.5	V-0	3	0	130	105	105			
		3.0	V-0	2	0	130	105	105			
SR G15V	ALL	0.75	V-0	-	-	65	65	65			
Polyamide 66 (PA66), "Leona", furnished as pellets.											
1200S	ALL	0.70	V-2	-	-	65	65	65	1	5	0
		1.5	V-2	4	0	65	65	65			
		3.0	V-2	2	0	65	65	65			
1300F	ALL	0.71	V-2	4	0	105	75	85	0	6	0
		1.5	V-2	4	0	105	75	85			
		3.0	V-2	3	0	105	75	85			
1300S	NC	0.40	V-2	-	-	65	65	65	0	6	0
	ALL	0.71	V-2	4	0	105	75	85			
		1.5	V-2	4	0	105	75	85			
		3.0	V-2	3	0	105	75	85			
13G50	BK	1.5	HB	-	-	65	65	65			
17N05	ALL	0.75	HB	-	-	65	65	65			
54G33	ALL	0.75	HB	3	0	125	90	120	1	6	1
		1.5	HB	2	0	125	90	120			
		3.0	HB	0	0	125	90	120			
54G43	ALL	0.80	HB	-	-	65	65	65			
90G33	ALL	1.5	HB	-	-	65	65	65			
		3.0	HB	-	-	65	65	65			
90G50	ALL	1.5	HB	2	0	65	65	65	0	5	0
		3.0	HB	0	0	65	65	65			
93G33	ALL	1.5	HB	3	0	65	65	65	0	5	0
		3.0	HB	0	0	65	65	65			
94N05	ALL	0.75	HB	-	-	65	65	65			
CR303	BK	0.75	HB	-	-	65	65	65			
FG170	BK	0.40	V-0	-	-	65	65	65	1	6	3
	ALL	0.75	V-0	0	0	105	105	105			
		1.5	V-0	0	0	105	105	105			

		3.0	V-0	0	0	105	105	105			
FG171	NC	0.50	V-0	1	0	130	-	-	1	6	2
	ALL	0.75	V-0	0	0	130	-	120			
		1.5	V-0	0	0	130	115	120			
		3.0	V-0	0	0	130	115	120			
FG172(j)	NC	0.41	V-0	-	-	65	-	65	1	6	2
		0.50	V-0	0	0	130	-	65			
	ALL	0.75	V-0	0	0	130	115	120			
		1.5	V-0, 5VA	0	0	130	115	120			
		3.0	V-0	0	0	130	115	120			
FG173(j)	NC	0.50	V-0	0	0	65	65	65	3	7	2
	ALL	0.72	V-0	0	0	65	65	65			
		0.75	V-0	0	0	130	110	110			
		1.5	V-0	0	0	130	120	120			
		3.0	V-0	0	0	130	120	120			
FH772	ALL	0.70	V-0	-	-	65	65	65	2	5	0
		0.75	V-0	0	0	65	65	65			
		3.0	V-0	-	-	65	65	65			
FR561	ALL	0.70	V-0	4	1	130	90	105	0	5	0
		1.5	V-0	3	0	130	105	105			
		3.0	V-0	2	0	130	105	105			
TR381	ALL	0.75	HB	-	-	65	65	65			
Polyamide 66 (PA66), "Leona".											
91G60	BK	0.75	HB	-	-	-	-	-			
		1.5	HB	-	-	-	-	-			
		3.0	HB	-	-	-	-	-			
WG143	ALL	0.75	HB	-	-	65	65	65			
		3.0	HB	-	-	65	65	65			
Polyamide 66 (PA66), furnished as pellets.											
1330G	ALL	0.75	HB	4	0	125	105	105	1	5	0
		1.5	HB	1	0	125	105	115			
		3.0	HB	0	0	125	105	120			
1402SH	ALL	0.69	V-2	4	0	120	95	100	0	6	1
		1.5	V-2	3	0	120	95	100			
		3.0	V-2	2	0	120	95	100			
FR560	ALL	0.38	V-0	-	-	65	65	65	0	5	0
		0.75	V-0	4	1	130	90	105			
		1.5	V-0	3	0	130	105	105			
		3.0	V-0	2	0	130	105	105			
MR001	ALL	0.71	HB	4	0	105	75	75	0	6	0
		1.5	HB	3	0	105	75	75			
		3.0	HB	3	0	105	75	85			
Polymethyl Methacrylate (PMMA), "Delaglas", furnished as cast sheets.											
Delaglas K	NC, GY, SM	2.0	HB	-	-	50	50	50			
	BK	6.0	HB	-	-	50	50	50			
Polymethyl Methacrylate (PMMA), "Delaglas", furnished as extruded sheet.											

Delaglas HA, Delaglas HAS											
	NC	0.8	HB	-	-	50	50	50			
		3.0	HB	-	-	50	50	50			
Polymethyl Methacrylate (PMMA), "Delaglas", furnished as extruded sheets.											
Delaglas A, Delaglas AC, Delaglas AD, Delaglas AE, Delaglas AF, Delaglas AL, Delaglas AM, Delaglas AP, Deleglas ACE											
	NC	0.75	HB	-	-	50	50	50			
	ALL	1.4	HB	3	0	50	50	50			
		3.0	HB	3	0	50	50	50			
Delaglas CR	NC, WT	1.5	HB	3	0	50	50	50			
		3.0	HB	3	0	50	50	50			
Delaglas SR, Delaglas SRM											
	ALL	1.5	HB	4	0	50	50	50	0		0
		3.0	HB	3	0	50	50	50			
		6.0	HB	2	0	50	50	50			
Polymethyl Methacrylate (PMMA), "Delaglas", furnished as pellets.											
Delaglas TD (l)	ALL	1.4	HB	3	0	50	50	50			
		3.0	HB	3	0	50	50	50			
Polymethyl Methacrylate (PMMA), "Delaglas", furnished as sheets.											
Delaglas DM	WT	2.0	HB	-	-	50	50	50			
Delaglas TD (l)	ALL	1.4	HB	3	0	50	50	50			
		3.0	HB	3	0	50	50	50			
Delaprism (b)-M	NC, BN, BL	1.5	HB	3	0	50	50	50			
		3.0	HB	3	0	50	50	50			
Polymethyl Methacrylate (PMMA), Anhydride acrylic copolymer, "DELMORE", furnished as pellets.											
H-350A	ALL	1.5	HB	-	-	50	50	50			
Polymethyl Methacrylate (PMMA), "Delpet", furnished as pellets.											
50N	ALL	1.5	HB	3	0	50	50	50	0	5	0
		3.0	HB	3	0	50	50	50			
		6.0	HB	3	0	50	50	50			
60N, 560F	ALL	1.5	HB	4	0	50	50	50	0	5	0
		3.0	HB	3	0	50	50	50			
		6.0	HB	2	0	50	50	50			
670N	ALL	1.5	HB	4	0	50	50	50	0	5	0
		3.0	HB	3	0	50	50	50			
		6.0	HB	2	0	50	50	50			
720V, 70NH, 70NHX, 70FR											
	NC	1.5	HB	-	-	50	50	50			
80N, 80NA, 80NR, 80NY, 808N, 80NR-S, 80NH, 80NHX											
	NC	1.0	HB	-	-	50	50	50	0	5	0
	ALL	1.5	HB	3	0	50	50	50			
		3.0	HB	3	0	50	50	50			
		6.0	HB	2	0	50	50	50			
820F	ALL	1.5	HB	3	0	50	50	50	0	5	0
		3.0	HB	2	0	50	50	50			
		6.0	HB	2	0	50	50	50			
890K	NC	1.5	HB	-	-	50	50	50			

980N	ALL	1.5	HB	3	0	50	50	50	0	5	0
		3.0	HB	3	0	50	50	50			
		6.0	HB	2	0	50	50	50			
981J, 982J	ALL	1.5	HB	3	0	50	50	50	0	5	0
		3.0	HB	3	0	50	50	50			
		6.0	HB	2	0	50	50	50			
FDB(c)	WT	1.5	HB	-	-	50	50	50			
FDT	NC	1.5	HB	-	-	50	50	50			
FILA(a)	BK	1.5	HB	4	0	50	50	50	0	5	0
		3.0	HB	3	0	50	50	50			
		6.0	HB	2	0	50	50	50			
FILB(a)	BK	1.5	HB	3	0	50	50	50	0	5	0
		3.0	HB	3	0	50	50	50			
		6.0	HB	2	0	50	50	50			
HSOTB, HSOTC	NC	1.0	HB	-	-	50	50	50			
	ALL	1.5	HB	-	-	50	50	50			
LP-1	ALL	1.5	HB	-	-	50	50	50			
SR5400, SR5350, SR5300, SR5200											
	ALL	1.5	HB	4	1	50	50	50	0	5	0
		3.0	HB	3	0	50	50	50			
		6.0	HB	3	0	50	50	50			
SR5500	ALL	1.5	HB	4	1	50	50	50	0	4	0
		3.0	HB	3	0	50	50	50			
		6.0	HB	2	0	50	50	50			
SR6400, SR6350, SR6300, SR6200											
	ALL	1.5	HB	4	0	50	50	50	0	5	0
		3.0	HB	3	0	50	50	50			
		6.0	HB	2	0	50	50	50			
SR6500	ALL	1.5	HB	4	0	50	50	50	0	4	0
		3.0	HB	3	0	50	50	50			
		6.0	HB	2	0	50	50	50			
SR8201	ALL	1.5	HB	4	0	50	50	50	0	5	0
		3.0	HB	3	0	50	50	50			
		6.0	HB	2	0	50	50	50			
SR8400, SR8350, SR8330, SR8300, SR8200											
	ALL	1.5	HB	4	0	50	50	50	0	5	0
		3.0	HB	3	0	50	50	50			
		6.0	HB	2	0	50	50	50			
SR8500	BK	1.5	HB	4	0	50	50	50	0	4	0
		3.0	HB	3	0	50	50	50			
		6.0	HB	1	0	50	50	50			
SRD73	ALL	1.5	HB	4	0	50	50	50	0	5	0
		3.0	HB	3	0	50	50	50			
		6.0	HB	2	0	50	50	50			
Polyoxymethylene (POM), "Tenac-C", furnished as pellets.											
ZLV40	ALL	0.79	HB	-	-	50	50	50			

furnished as pellets.										
70FH	NC	1.5	HB	4	0	50	50	50	0	5
		3.0	HB	3	0	50	50	50		
		6.0	HB	2	0	50	50	50		

(a) - With or without suffix number.

(b) - Denotes any numbers indicating pattern number of sheet surface.

(c) - Denotes any number 1-20 incl.

(g) - For 1.5 mm 94V-1, all colors except NC.

(i) - Virgin and regrind up to 100% by weight incl. have the same basic characteristics with respect to II, TS, HDT and flammability.

(j) - Virgin and regrind up to 50% by weight inclusive, have the same basic characteristics.

(k) - Virgin and regrind up to 50% by weight inclusive have the same basic material characteristics with regard to volume resistivity, dielectric strength, and CTI; for flammability at 0.71 mm and above in red and black only

(l) - May be followed by one digit number 1 through 9 inclusive.

(m) - Virgin and regrind up to 50% by weight inclusive, have the same basic characteristics with respect to II, TS, HDT and flame.

(n) - Virgin and regrind up to 50% by weight inclusive, have the same basic characteristics with respect to flammability

(o) - Virgin and regrind up to 25% by weight inclusive have the same basic characteristics. In addition, virgin and regrind 26 to 50% by weight inclusive have the same basic material characteristics except the regrind has generic RTIs of 65 C for the electrical and mechanical properties.

(p) - Virgin and regrind up to 50% by weight inclusive have the same basic material characteristics with regard to flammability for unpigmented.

Marking: Company name or tradename "DELAGLAS" , "DELAPRISM" , "DELPET" , "HARDEC" , "LEONA" , "LEOTEL" , "LOYMER" , "LYNEX-T" , "SUNPET" , "TENAC" and material designation on container, wrapper or finished part.

Last Updated on 2009-04-21

Questions? Notice of Disclaimer Page Top

ONLINE CERTIFICATIONS DIRECTORY

AVLV2.E77981
Appliance Wiring Material - Component

Page Bottom

Appliance Wiring Material - Component

See General Information for Appliance Wiring Material - Component

WONDERFUL HI-TECH CO LTD E77981
2ND FL
WU KU INDUSTRIAL DISTRICT
72 WU KONG 6TH RD
TAIPEI HSIEN, 248 TAIWAN

Table of Recognized Styles							
Single-conductor, thermoplastic insulation.							
1007	1024	1150	1332	1408	1509	1674	10231
1008	1025	1185	1333	1409	1533	1691	10254
1009	1026	1195	1335	1410	1550	1692	10272
1010	1027	1208	1336	1411	1569	1726	10368
1011	1028	1226	1337	1412	1571	1741	10369
1012	1029	1227	1338	1413	1581	1743	10439
1013	1030	1230	1339	1414	1589	1745	10444
1014	1031	1275	1340	1429	1605	1777	10515
1015	1032	1283	1342	1430	1617	1790	10602
1016	1033	1316	1344	1431	1618	1792	10627
1017	1061	1317	1345	1436	1631	1803	
1018	1071	1318	1346	1452	1640	1867	
1019	1095	1319	1347	1478	1641	1868	
1020	1107	1320	1354	1489	1650	1953	
1021	1113	1321	1365	1497	1651	1973	
1022	1118	1330	1375	1500	1663	1979	
1023	1120	1331	1381	1503	1672	10064	
Multiple-conductor, thermoplastic insulation.							
2084	2331	2468	2562	2637	2851	2991	20276
2092	2343	2474	2569	2648	2854	2992	20279
2093	2344	2483	2570	2651	2876	2993	20288
2094	2345	2490	2571	2661	2877	2994	20306
2095	2346	2493	2574	2668	2896	20002	20417
2096	2384	2497	2576	2674	2919	20006	20489
2097	2385	2498	2582	2678	2933	20035	20549
2098	2386	2501	2583	2704	2934	20058	20792
2099	2387	2502	2584	2717	2935	20063	21064
2100	2388	2511	2589	2725	2936	20121	21088
2101	2396	2516	2591	2733	2937	20127	21099
2102	2404	2517	2592	2777	2938	20187	21143

2103	2405	2528	2598	2789	2951	20197	21307
2106	2444	2532	2614	2791	2960	20207	
2127	2448	2547	2623	2824	2961	20233	
2128	2462	2549	2626	2833	2969	20245	
2265	2463	2550	2630	2835	2970	20246	
2273	2464	2552	2631	2844	2990	20247	
Single-conductor, thermoset insulation.							
3034	3168	3266	3302	3376	3386	3443	
3039	3173	3271	3321	3377	3424	3619	
3044	3199	3286	3348	3385	3439		
Multiple-conductor, thermoset insulation.							
4028	4032	4036	4384	4469	4478		

Marking: Company name, voltage rating, temperature rating, conductor size, conductor material if other than copper, and use.
Last Updated on 2009-03-09

Questions? Notice of Disclaimer Page Top

ONLINE CERTIFICATIONS DIRECTORY

QMMY2.E249493
Fabricated Parts - Component

Page Bottom

Fabricated Parts - Component

See General Information for Fabricated Parts - Component

SUZHOU NICHIAS INDUSTRIAL PRODUCTS CO LTD E249493
SUZHOU INDUSTRIAL PARK
208 QING QIU ST
SUZHOU, JIANGSU 215126 CHINA

Fabricated plastic parts, Recognition based on material traceability, UL assigned designation F1071.

Marking: Company name and UL assigned code designation on part, shipping carton, or spec sheet in shipping carton.
Last Updated on 2004-08-18

Questions? Notice of Disclaimer Page Top