



**Aerospace
Systems Division**

APPROVED MATERIALS LIST
FOR ALSEP EQUIPMENT

Addendum 1

ATM 242 (E1)

PAGE Cover OF 39

DATE July 15, 1971

1. Amendment 1 to ATM 242 is issued to incorporate additional non-metallic materials which can be approved on the basis of successful prior use in ALSEP and evidence that the requirements of Array E can be met. Other changes are:

1. Page 3 para. 1.0; amend to correct the Array E operation and storage period.
2. Show alternate material designation for EPON adhesives made by Hysol after Hysol acquired Shell Adhesives: (106-107-108-111-112-116-117).
3. Show new source for Narmco Adhesives; Crest Products (109, 110).
4. An entry has been added to Table II A- II K to show acceptability per MSFC ATM Program criteria. (Ref. 7 added).
5. Add entries in Table II-L to provide cross-reference data corresponding to the materials added in Table II-A thru II-K.
6. Update the manufacturers addresses from current directory listings (List II-M).
7. Delete Sec. III as it contained a list of materials used in earlier arrays and was provided for guidance prior to detail design of Array E.

2. New materials added in Tables II-A thru II-K are:

124	328	614	810	815	1019
125	329	707	811	924	1112
325	330	807	812	925	1113
326	331	808	813	926	
327	420	814	927	814	

3. To incorporate amendment 1:

- a. Replace page 3
- b. Replace Sec. II entirely
- c. Discard Section III and delete reference to it in the Table of Contents.

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- 1.0 INTRODUCTION. Materials used in ALSEP equipment are required to be compatible with the use of the end item and to be compatible with the LM vehicle in which they are transported to the lunar surface. Additionally the materials must be selected for stability in the lunar surface environment, to maximize the probability of equipment operation for a period of at least two years on the lunar surface following operation and storage on earth for up to three years.
- 2.0 SCOPE. The use of materials contained in Sections I and II of this report is mandatory for all items of flight hardware. Materials listed herein have been selected from Ref. 1 and Ref. 2 having been approved for use in the Apollo Command Module and the LM, as of the date of their issue.
- 3.0 REQUIREMENTS.
 - 3.1 General. Metals used in ALSEP equipment shall conform to the base metals and alloys contained in Section I. Non-metals used in ALSEP equipment shall be restricted to those contained in Section II.
 - 3.2 Deviations. If in the design of ALSEP equipment, a requirement exists which cannot be met by materials listed as approved herein, the user shall submit a request for approval to Bendix providing the identification of the materials, the intended specific application, and the bases for justifying its use.

SECTION II Nonmetallic Materials

1.0 Introduction

The selection of and the listing of nonmetallic materials in this section is based primarily on the prior use of such materials in Apollo Command Module and LM as listed in Refs 1, 2, and 3. Additionally acceptable materials contained in Ref. 4 were used as a guide in supplementing the initial list. The criteria for acceptance in Refs 1, 2 and 3 were contained in Ref 5, (which is now superseded by Ref. 6).

2.0 Scope

Nonmetallic materials tabulated in this section are primarily organic compounds which are tested to the criteria described in par 3.0 below. Inorganic materials such as glasses, ferrites, and ceramics do not ordinarily pose a compatibility hazard when tested to the criteria stated.

3.0 Requirements

The requirements for approval of nonmetallic material for use in the Apollo Command Module are contained in Ref. 5. The types of tests applicable and the acceptable limits are as follows:

1. Combustion Rate: Less than 0.5"/sec in oxygen at 5 psia.
 - *2. Odor: Sample detected by 10 qualified panel members receives an average score of 20 or less indicating "barely detectable" or "easily detectable".
 - *3. Carbon Monoxide: Offgas less than 20 ppm of sample weight.
 - *4. Total Organics: Offgas less than 100 ppm of sample weight.
 5. Flash Point: 400°F or higher in 95% oxygen at 5 psia.
 6. Fire Point: 450°F or higher in 95% oxygen at 5 psia.
- *Gas sample extracted from test chamber after baking specimen 72 hours at 155°F in 5 psia (260 torr) oxygen.

For ALSEP equipment which does not operate in the oxygen environment of the cabin, the principle criteria are categories 3 and 4 above which indicate the stability of a material at elevated temperature and reduced pressure. The test temperature of 155°F approximate the expected maximum temperature (160°F) for ALSEP Central Station electronics. (The value of 155°F was selected to offer a 20°F margin over the maximum short-time cabin temperature excursion to 135°F.)

In the following tables the status of the material is listed indicating the approval status contained in references 1, 2, and 4. The column headed "N" symbolizes approval by North American Aviation in ref. 1, and the column headed G denotes listing in Ref. 2. Symbol "A" means acceptable and "R" means rejected. For the column headed MSC the status given in ref. 4 has the following significance. (Each of the 6 columns represent the requirements stated above in that order left to right):

- A Tested. Meets MSC-ASPO requirements
- B Tested to non-standard requirements; judged acceptable
- C Not tested. Established as acceptable by similarity of application
- U Tested. Does not meet MSC-ASPO requirements.
- W Tested to non-standard requirements. Judged unacceptable.
- Y Not tested. Established as unacceptable by similarity.

The column headed DESC is a cross reference to Table II-L which lists these materials by function or form and provides additional descriptive information including the manufacturer's recommended use temperature range.

Table II-L is provided as an aid to designers to select materials for specific applications.

The file number represents a file maintained by the Parts & Materials group which contains manufacturer's literature providing application and property data as well as recommended processing information.

Additional data on the stability of materials for space applications is provided by Ref. 7. The column headed "MSFC" indicates whether the material is acceptable "A" or unacceptable "U" based on the criteria stated in Ref. 7. The criteria for acceptance is "The steady-state rate of weight loss at 100°C (in vacuum of less than 1×10^{-6} torr) shall not exceed 0.04% /cm²/hr. Steady state is defined as that point where the weight loss has been constant for 8 hours."

REFERENCES

1. North American Aviation Spec. No. MC999-0058 "Approved Materials for use in the Apollo Spacecraft, General Specification for" Rev. D 15 June 1966.
2. Grumman Aircraft Engineering Corp I. C. D. # LIS-360-22101 "LEM Scientific Equipment Materials Compatability Requirements" 21 October 1965.
3. General Electric Missile & Space Div. NE0060-07-03 "SNAP-27 Selected Materials List" 21 March 1966.
4. NASA/MSC MSC-A-D-66-4 "Crew Bay Nonmetallic Materials Status Report of Unacceptable /Acceptable Materials, Revision F" 30 December 1966.
5. NASA/MSC MSC-A-66-3 "Procedure and Requirements for the Evaluation of Apollo Crew Bay Materials".
6. NASA/MSC D-NA-0002 "Procedures and Requirements for the Flammability and Offgassing Evaluation of Manned Spacecraft Non-metallic Materials".
7. NASA/MSFC 50M02442 Rev "U" March 1, 1971 "ATM Material Control for Contamination Due to Outgassing".

FILE	DESIGNATION	VENDOR	MSC	STATUS		DESC	MSFC
				N	G		
101	HT-424	BLOOMINGDALE	CBBBCC		A	A1	A
102	FM-1000	"	BBAAAA		A	A4	U
103	CORFIL 615	"	YWWBCC		A	A5	
104	EC1933B/A	3M-ACD	BBBBCC		A	A15	
105	METLBOND 329	NARMCO	BBBBCC		A	A3	
106	EPON 919;EA 919	SHELL ADH/HYSOL	BWBBCC		A	A6	
107	EPON 923;EA 923	" "	CAWWCC		A	A7	
108	EPON 934;EA 934	" "	BBBBCC		A	A8	
109	3135/7111	NARMCO/CREST	CBWWCC			A13	A
110	7343/7139	" "	CBBBCC			A23	A(1)
111	EPON VI; EA VI	SHELL ADH/HYSOL	BWBBBC			A9	
112	EPON VIII; EA VIII	" "	BWBBBC			A10	
113	DELTABOND 152	WAKEFIELD				A21	U
114	AEROBOND 422	ADHES ENG				A2	
115	EC-870	3M-ACD	CBBBCC	R		A16	
116	EPON 901/B-1;EA 901/B-1	SHELL ADH/HYSOL				A11	A
117	EPON 901/B-3;EA 901/B-3	" "				A12	A(2)
118	EC-1357	3M-ACD				A17	A
119	X-81	ARMSTRONG				A14	A
120	ECCOBOND 56C/9	EMERSON & CUM	CBCBCC			A22	A
121	A-4000	DOW-C	CWBWYC			A20	
122	SILASTIC 140	DOW-C	BAAABC			A18	A
123	ECCOBOND 45	EMERSON & CUM	CBAACC			A19	U
124	EC 2216B/A	3M-ACD	BUAABC			A15a	A
125	CHO BOND 1029	CHOMERIC				A24	A

(1) Cure: RT 24 hrs.; 160°F, 48 hrs.

(2) Cure: 200°F, 3 hrs.

TABLE II-A ADHESIVES

FILE	DESIGNATION	VENDOR	MSC	STATUS		DESC	MSFC
				N	G		
201	SR634-70	STILLMAN	CCBBAA			C1	
202	77-545	PARKER	CBCBAC			C2	A
203	SILASTIC 50	DOW-C ENPD	CBBBAA			C4	
204	SILASTIC 651	DOW-C ENPD	CBBBCC			C5	A(1)
205	SILASTIC 1410	DOW-C ENPD	CBAACC				
206	TH 1025	STILLMAN		A		C7	
207	CANCELLED						
208*	SILASTIC 960U	DOW-C ENPD	CAAACC			C6	
209	CANCELLED						
210	9-70-1	AGC INC	BBBBBC			C8	
211	VITON A	DUPONT ELASTOMER	CBBBCC			C3	A
212	CHO-SEAL 1214	CHOMERICS				J5	U
213	CHO-SEAL 1215	CHOMERICS				J6	A

15

*STALWART RUBBER ADEL COMP NO 7010

(1) BFO Cure; post-cure 480°F, 24 hrs.

TABLE II B ELASTOMERS

FILE	DESIGNATION	VENDOR/SPEC	MSC	STATUS		DESC	MSFC
				N	G		
301	TUZ-XX	HITEMP				N2	
"	TUY-XX	"				N1	
302	M16878/E-XX	MIL-W-16878/4				P1	
303	CANCELLED						
304	"						
305	"						
306	SUROK	ITT/SURPREN		A		P8	
307	M16878/ET-XX	MIL-W-16878/6A				P2	
307	M16878/KT-XX	MIL-W-16878/13				P3	
308	AI-220	GE-W&C				P9	
309	7300, 7302, 7305	MYSTIK	CAAACC			M15	
310	TEMP-R-TAPE T	CONN HD RUB	CAAACC	A		M10	
311	TEMP-R-GLAS A2005	"	CAAACC	A		M11	
312	7503, 7504, 7505, 7510	MYSTIK	CAAACC			M3	
313	M81381/1	MIL-W-81381/1				P4	
314	M81381/2	MIL-W-81381/2				P5	
315	M81381/3	MIL-W-81381/3				P6	
316	M81381/4	MIL-W-81381/4				P7	
317	HEAVY NYLESE	PHELPS-DODGE	CBBBCC			P10	U
318	7366	MYSTIK				M18	
319	60, 61	3M-EPD	CBBBCC			M7	A
320	62	3M-EPD	CBBBCC			M9	
321	PENNTUBE II-SMT-XX	PENNA FLUORO	ABCBBC			N3	
322	POLY-THERMALEZE	PHELPS-DODGE	CBCBBC			P11	
323	ML MAGNET WIRE	PHELPS-DODGE	CACABC			P12	A
324	#465	3M-	CAAACC	A		M19	
325	THERMOFIT KYNAR	RAYCLAD TUBES	ABBBCC			N5	A
326	TEMP-R-TAPE 350	CONN HD RUB				M18a	
327	7361	MYSTIK				M18b	
328	RG-178B/U	MIL-C-17				P13	
329	GR-188A/U, RG316A/U	MIL-C-17				P14	
330	RG-196A/U(S/S BY RG-178)	"				P15	
331	C37-25C3025H0023	MSFC-SPEC-220				P16	A

TABLE II-C ELECTRICAL INSULATION AND WIRING

FILE	DESIGNATION	VENDOR	MSC	STATUS		DESC	MSFC
				N	G		
401	NEXTEL 401	3M-RPD	CBBBCC		A	B8	A(1)
402	APCO 1260	APPLIED PROD	CWCCCC	A		B4	
403	73X	INDEPENDENT	CBWWYY	A	A	H1	A
404	DAPON SEALANT	FMC		A		B13	
405	PS-9	METAL-CAL	CAAACC	A		K3	
406	9365	RUSTOLEUM			A	B14	
407	EMRALON 310	ACHESON COLL	BBBBBB		A	B2	
408	EMRALON 320	"	YWWYY		A	B3	
409	DC325	DOW-C ENPD	WBBBCC		A	B1	
410	PV-100	VITA-VAR				B9	
411	DC 92-007	DOW-C ENPD				B10	
412	SOLITHANE 113/C-113-300	THIOKOL	CBAAAA			B5	
413	LAMINAR X-500/7-C-23	MAGNA CHEM	CUAUYY			B6	A(2)
414	S-13G	ILL INST TECH				B11	A
415	CAT-L-INK 50-XXX	WORNOW	CUUUCC			H2	A
416	Z-93	ILL INST TECH				B12	A
417	KT-26 FOIL	KINGSLEY	CBCBBC			H4	
418	K-36 FOIL	KINGSLEY	CAAACC			H5	
419	HUMISEAL 1B12	COLUMBIA TECH	CBCWBC			B7	A
420	954-1000	DUPONT				B3a	(3)

(1) Cure RT 1 hr; 150°F, 15 min; 250°F, 2 hrs

(2) Cure 150°F 2 hrs; 300°F, 4 hrs

(3) Post cure 300°F, 1 hr

TABLE II-D FINISHES, COATINGS, MARKING MATERIAL

<u>FILE</u>	<u>DESIGNATION</u>	<u>VENDOR</u>	<u>MSC</u>	<u>STATUS</u>		<u>DESC</u>	<u>MSFC</u>
				<u>N</u>	<u>G</u>		
501	VULTAFOAM 15L-206	GEN LATEX	WBBBCC		A	E8	
502	ISOFOAM L-131	ISOCYANATE PROD	WBBBCC		A	E9	
503	NOPCOFOAM A 206	NOPCO CHEM	YAAABC			E12	
504	STAFOAM AA604	POLYTRON CO		A		E14	
505	ISOFOAM PE-6W	ISOCYANATE PROD	YBAABC			E13	
506	POLYFOAM 17-6	GEN TIRE		A		E5	
507	SCOTTFOAM 60PP1	SCOTT PAPER				E6	
508	COHRLASTIC R-10470	CONN HD RUB	CABBCC			E3	A
509	3-172-1	AGC INC	BBBBBB			E4	
510	ECCOFOAM FP	EMERSON & CUM	CBCBBC	R		E10	
511	ECCOFOAM FPH	"	YWYYYY			E11	A
512	CPR-9800	UPJOHN-CPR				E7	
513	ECCOFOAM S	EMERSON & CUM				E1	
514	ECCOFOAM SH	"				E2	A

TABLE II-E FOAMS

<u>FILE</u>	<u>DESIGNATION</u>	<u>VENDOR</u>	<u>MSC</u>	<u>STATUS</u>		<u>DESC</u>	<u>MSFC</u>
				<u>N</u>	<u>G</u>		
601	MOLYKOTE Z	DOW-C ENPD				F1	A
602	DC-340	DOW-C ENPD	CBBBCC			J1	U
603	FABROID	TRANSPORT DYN		A		J4	
604	LUBECO 905	LUBECO	CBBBCC			F2	A
605	LUBECO N350A	LUBECO	CBWBCC			F3	
606	INVELCO 33F	DRILUBE	CBBBCC			F8	
607	CANCELLED						
608	MOLYKOTE X-15	DOW-C ENPD	BBBBBB	A		F4	
609	ELECTROFILM 2306	ELECTROFILM				F5	
610	MOLYKOTE 321	DOW-C ENPD				F6	A(1)
611	MICROSEAL 100-1	MICROSEAL CORP				F7	A
612	KRYTOX 240 AC	DU PONT PETROL	CAAAAA			F9	U
613	VERSILUBE G-300	GE SPD	BBBBCC			F10	
614	G683	GE SPD	BBBBBC			F13	A

(1) Cure: RT, 1/2 hr, vacuum bake 300°F, 10^{-3} mmHg, 1/2 hr

TABLE II-F GREASES & LUBRICANTS

FILE	DESIGNATION	VENDOR/SPEC	MSC	STATUS		DESC	MSFC
				N	G		
701	RX-1360-T	ROGERS CORP	CAAACC			K16	
702	DIALL FS-80	MESA	CAAACC			K13	
703	DIALL 52-70-70	"	CBBWCC			K14	A
704	DIALL FS-10	"	CAAACC			K15	
705	EPIALL 1908	"	CBAAAA			K17	A
706	ZYTEL 101	DUPONT PLASTICS	BBBBBB			K21	
707	LEXAN	GEN. ELEC.	WBBBAA			K28	A

801	SCOTCHPLY 1002	3M	CBBBCC			K8	
802	G-11-861-1	NATL VULC	CBBBCC			K9	
803	CTL-91LD	U.S. POLYMERIC		A		K5	U
804	FI30-40	COAST				K6	
805	F-141	"				K7	
806	MX6500	3M	CBAACC			K10	
807	TYPE GEB	MIL-P-18177	CBBBCC			K8a	
808	TYPE GH	MIL-P-13949	CBBBCC			K9a	
809	BASE GF	MIL-P-55617				K9d	
810	BASE GF	MIL-G-55636				K6a	
811	TYPE GE	MIL-P-13949				K9b	A
812	TYPE GEE	MIL-P-18177				K8b	A
813	TYPE GB	MIL-P-13949	CBBBCC			K9e	
814	FR-45	FORMICA				K8c	A
815	TYPE GF	MIL-P-13949				K9c	

TABLE II-G MOLDING PLASTICS
TABLE II-H PLASTIC LAMINATES

FILE	DESIGNATION	VENDOR	MSC	STATUS		DESCR	MSFC
				N	G		
901	STYCAST 1090/11	EMERSON & CUM	BBBBCC		A	L8	A
902	RTV 560	GE-SPD	CCBBCC			L10	
903	RTV 60	"	BBBBAB			L11	U
904	RTV 90	"	CBBBAB			L12	
905	PR 1542	PRODUCTS RES		A		L21	
906	DC 11	DOW-C	BBBWAA			F11	
907	DC XL-1-2005	DOW-C		A		F12	
908	PR-1538	PRODUCTS RES	CWBBAB			L19	
909	EPOCAST 3E8028	FURANE	BAAABC	A		L1	
910	SILASTIC RTV 601	DOW-C	BBBBBC		A	L13	U
911	SYLGARD 183	DOW-C	BAAABC		A	L14	
912	EPON 828/Z	SHELL CHEM	CBBBCC		A	L2	
913	EC 1663 B/A	3M-ACD	BAAACC	A	A	L3	
914	SILASTIC RTV 731	DOW-C	BBBBCC		A	L16	
915	STYCAST 2850 FT/11	EMERSON & CUM	BBBBCC		A	L4	
916	MARAGLASS A 655/555	MARBLETTE	BBBBCC		A	L9	
917	EPOXYLITE 6203	EPOXYLITE	CUAAAA			L6	
918	LOCKTITE A, B, C, E, H	LOCKTITE	CWWWYY			L18	U (GRADE
919	DC XR-6-3501	DOW-C	CAAACC			L15	
920	EPON 826/D	SHELL CHEM				L5	
921	SILASTIC 731RTV	DOW-C	BBBBCC			L16	U
922	DC 92-024	DOW-C				L17	
923	STYCAST 1090SI/24LV	EMERSON & CUM	CBBBCC			L7	
924	STYCAST 2850KT	EMERSON & CUM				L8a	
925	DC 93-500	DOW-C				L14a	A
926	PR-1933	PRODUCTS RES	CBACCC			L14b	
927	DC-3-45	DOW-C				L14c	A(1)

(1) Vacuum bake 8 hrs at 100°C and 10^{-6} torr.

TABLE II-I POTTING & SEALING COMPOUNDS

<u>FILE</u>	<u>DESIGNATION</u>	<u>VENDOR</u>	<u>MSC</u>	<u>STATUS</u>		<u>DESC</u>	<u>MSFC</u>
				<u>N</u>	<u>G</u>		
1001	TEFLON TFE	DUPONT PLASTICS	ABBBBC			K18	A
1002	TEFLON FEP	DUPONT PLASTICS	ABBBBC			K2	A
1003	KEL-F 81	3M		A		K19	A
1004	NYLATRON GS	POLYMER CORP	CBBBCC			K22	
1005	PLEX II UVA	ROHM & HAAS	BBBECC	A	A	K12	
1006	SS3330	SWEDLOW				J7	
1007	BAUM X252	BAUM	YBBBUU	A		K26	
1008	KYNAR	PENNSAULT	ABBCCA	A	A	K27	A
1009	REXOLITE 1422	BRAND-REX	YBBBY			K25	
1010	5224-100	SHELL PLASTICS	CAAACC	A		K24	
1011	ROYALITE PR55	U.S. ROYAL	CAAAAA	A	A	K10	
1012	MYLAR	DUPONT FILM	CBBBBC			K1	A
1013	CANCELLED						
1014	LUCITE	DUPONT PLASTICS			A	K11	
1015	VESPEL SP-1	DUPONT PLASTICS	BBBBCC		A	K23	
1016	RULON LD	DIXON	CBBBCC			K20	A
1017	UNASSIGNED						
1018	DACRON (FILAMENT)	DUPONT				J8	A
1019	NYLON (FILAMENT)	DUPONT				J9	A

TABLE II-J THERMOPLASTICS

<u>FILE</u>	<u>DESIGNATION</u>	<u>VENDOR</u>	<u>MSC</u>	<u>STATUS</u>		<u>DESC</u>	<u>MSFC</u>
				<u>N</u>	<u>G</u>		
1101	VELCRO	VELCRO CORP	WBBBBC		A	D1	A
1102	MIN-K 503	JOHNS-MANV	CBWBCC			G1	
1103	7402	MYSTIK	BBBCC			M20	
1104	MIL-W-19078A	PHOENIX TRIM		A		J3	
1105	CANCELLED						
1106	KAPTON	DUPONT FILM	ABBBCC			K4	A
1107	TEFGLAS 90LOF13A	WESTERN FIL	ABBBCC			M1	
1108	TEMPILABEL	TEMPIL	CBACCC			J2	
1109	EE-6600	PERMACEL	CBBBCC			M23	
1110	G-102700	SCHJELDAHL				M21	
1110	G-103500	"				M22	
1111	721-H	GUDEBROD				M2	U
1112	721-S	"				M2a	U
1113	S-905	STRASSBURGER				J10	A

TABLE II-K MISCELLANEOUS

TABLE II-L
INDEX OF TERMS LISTED BY FUNCTION & FORM

Adhesives (A)
Coatings (B)
Elastomers (C)
Fastener (D)
Foams (E)
Lubricants (F)
Insulation, Thermal (G)
Marking Materials (H)
Miscellaneous (J)
Plastics (K)
Potting Compounds & Sealants (L)
Tape (M)
Tubing (N)
Wire (P)

TABLE II-L INDEX BY FUNCTIONAL DESCRIPTION

ADHESIVES			
<u>DESIGNATION</u>	<u>DESCRIPTION</u>	<u>TEMP RANGE</u>	<u>FILE NO</u>
<u>Structural, film type, supported</u>			
A1	HT-424 Epoxy-phenolic, glass-fabric	-400 + 500	101
A2	AEROBOND 422 Epoxy-phenolic glass-fabric	- 67 + 400	114
A3	METLBOND 329 Epoxy-modif. Dacron-fabric	-423 + 450	105
<u>Structural, film type unsupported</u>			
A4	FM 1000 Epoxy-polyamide, white	-423 + 200	102
<u>Structural, core filler</u>			
A5	CORFIL 615 Paste	- 85 + 350	103
<u>Epoxy, 2-part, general purpose</u>			
A6	EPON 919 Flexible	- 67 + 180	106
A7	EPON 923	- 67 + 140	107
A8	EPON 934	- 67 + 375	108
A9	EPON VI	- 67 + 190	111
A10	EPON VIII	- 67 + 260	112
A11	EPON 901/B-1	- 67 + 250	116
A12	EPON 901/B-3	- 67 + 325	117
A13	3135/7111 R.T. Cure	-300 + 200	109
A14	X-81 Adj. flexibility	-	119
A15	EC-1933B/A	- 85 + 250	104
A15a	EC-2216B/A Gray R.T. Cure	- 67 + 150	124
<u>Elastomeric</u>			
A16	EC-870	- 20 + 180	115
A17	EC-1357	- 20 + 220	118
A18	SILASTIC 140 Silicone, 1-part, clear	- 85 + 300	122
A19	ECCOBOND 45	- 70 + 250	123
A20	A-4000	- 65 + 400	121
<u>Epoxy, thermal conductive</u>			
A21	DELTABOND 152 Alumina filler	- 70 + 300	113
<u>Epoxy, Electrical Conductor (Solder)</u>			
A22	ECCOBOND 56C/9 Silver filled	- 70 + 350	120
<u>Urethane</u>			
A23	7343/7139	-423 + 250	110
<u>Silicone, RFI Conductive</u>			
A24	CHOBOND 1029	- 65 + 257	125

<u>COATINGS</u>		<u>TEMP</u>	<u>FILE</u>
	<u>DESIGNATION</u>	<u>RANGE</u>	<u>NO</u>
	<u>Ablative</u>		
B1	DC-325 Silicone	- 90 + 1000	409
	<u>Anti-friction</u>		
B2	EMRALON 310 TFE dispersion, phenolic binder	+ 350	407
B3	EMRALON 320 TFE dispersion	+ 175	408
B3a	954-100 Teflon "S"		420
	<u>Conformal - (elec. insulating)</u>		
B4	APCO 1260 clear, fluorescent	-	402
B5	SOLITHANE 113/C-113-300 Clear	+ 250	412
B6	LAMINAR X-500/7-C-23 Clear	- 67 + 250	413
B7	HUMISEAL 1B12		419
	<u>Reflective, optical</u>		
B8	NEXTEL 401, C10 Black, Polyester-2 part	+ 350	401
B8	NEXTEL 401, A10 White Polyester-2 part	+ 350	401
	<u>Thermal Control white</u>		
B9	PV-100 Silicone-alkyd	+ 300	410
B10	DC 92-007 Silicone elastomer	- 85 to + 500	411
B11	S-13G silicone, zinc oxide	- 300 + 200	414
B12	Z-93 Potassium silicate, zinc oxide	- 383 + 500	416
	<u>Sealant, for castings</u>		
B13	DAPON SEALANT		404
	<u>Paint sea-water resistant</u>		
B14	9365		406
<u>ELASTOMERS</u>			
	<u>Butyl rubber, molded</u>		
C1	SR634-70 fuel resis.,	- 65 + 158	201
	<u>Fluoroelastomer</u>		
C2	77-545	- 20 + 400	202
C3	VITON		211
	<u>Silicone</u>		
C4	SILASTIC 50 white	- 70 + 500	203
C5	SILASTIC 651 red	- 130 + 500	204
C6	SILASTIC 960 U	- 130 + 480	208
C-7	TH-1025	- 80 + 437	206
C8	9-70-1	- 103 + 248	210
<u>FASTENER</u>			
	<u>Hook & Pile</u>		
D1	VELCRO	- 85 + 250	1101

<u>FOAMS</u>		<u>TEMP</u>	<u>FILE</u>
	<u>DESIGNATION</u>	<u>RANGE</u>	<u>NO</u>
	<u>Sheet Stock, rigid & semirigid</u>		
E1	ECCOFOAM S Urethane	- 94 + 304	513
E2	" SH "	- 94 + 400	514
	<u>Sheet Stock, resilient</u>		
E3	COHRLASTIC R-10470 Silicone	- 100, + 500	508
E4	AGC 3-172-1 Silicone	-100, + 500	509
E5	POLYFOAM 17-6 Urethane	- 40, + 200	506
E6	SCOTTFOAM 60PP1 Urethane, reticulated	- 50, + 250	507
E7	CPR 9800 Urethane	- 70, + 250	512
	<u>Resin, rigid & semi-rigid</u>		
E8	VULTAFOAM 15 L-206	+ 200	501
E9	ISOFOAM L-131	+ 225	502
E10	ECCOFOAM FP	-95, + 225	510
E11	" FPH	- 95, + 275	511
E12	NOPCOFOAM A 206	+ 250	503
E13	ISOFOAM PE-6W	+ 200	505
E14	STAFOAM AA604	+ 325	504

LUBRICANTS

	<u>Dry film, powder</u>		
F1	MOLYKOTE Z Molybdenum Disulfide	- 375, + 750	601
	<u>Dry film, bonded</u>		
F2	LUBECO 905 proprietary binder	- 452, + 500	604
F3	LUBECO N350A	-	605
F4	MOLYKOTE X-15 sodium silicate bonded	- 300, + 1200	608
F5	ELECTROFILM 2306, sodium silicate bonded	- 300, + 1200	609
F6	MOLYKOTE 321 inorganic bond (not NaSiO ₄)	-300, + 1000	610
	<u>Dry film, impinged</u>		
F7	MICROSEAL 100-1	- 400, + 2000	611
	<u>Oil & Grease</u>		
F8	INVELCO #33	+ 500	606
F9	KRYTOX 240AC		612
F10	VERSILUBE G300 Silicone		613
F11	DC 11 Silicone grease	- 40 + 500	906
F12	XL-1-2005 Silicone grease, FDA approved	- 40 + 450	907
F13	G-683 Silicone grease		614

INSULATION THERMAL

G1	MIN-K 503	to + 500°F	1102
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MARKING MATERIALS

	<u>DESIGNATION</u>	<u>DESCRIPTION</u>	<u>TEMP RANGE</u>	<u>FILE NO</u>
H1	<u>Ink, rubber stamp</u> 73-X		-	403
H2	<u>Paint, screen-process</u> CAT-L-INK 50-XXX Epoxy, 2-pt		to + 225	415
H3	<u>Label, self-adhesive</u> PS-9		- 85 to + 325	405
H4	<u>Foil, marking</u> KT-26			417
H5	K-36			418

MISCELLANEOUS

J1	<u>Heat Sink Compound</u> DC 340		+ 392°F	602
J2	<u>Indicator, surface temperature</u> TEMPILABEL		to 500°F	1108
J3	<u>Webbing, dacron, latex-treated</u> MIL-W-19078A			1104
J4	<u>Bearing liner</u> FABROID woven TFE/woven glass		- 120 to +250	603
J5	<u>Shielding Gasket, elastomeric</u> CHO-SEAL 1214		to 257	212
J6	CHO-SEAL 1215		to 257	213
J7	<u>Window, glazed, impact resistant</u> SS3330 acrylic cast interlayer		- 40 + 200	1006
J8	<u>Fabrics, cloth, cord, thread</u> DACRON Polyester filament		-100 + 250	1018
J9	NYLON Poylamide filament		-100 + 250	1019
J10	S-905 Silk, natural		-100 + 225	1113

PLASTICS

	<u>DESIGNATION</u> <u>Film and Sheet Stock</u>	<u>DESCRIPTION</u>	<u>TEMP</u> <u>RANGE</u>	<u>FILE</u> <u>NO.</u>
K1	MYLAR	Polyester	- 75 to +266	1012
K2	TEFLON FEP	Fluorinated Ethylene Propylene	-427 to +392	1002
K3	TEFLON TFE	Polytetra Fluoroethylene	-450 to +500	1001
K4	KAPTON	Polymide MIL-P-46112	-320 to +500	1106
<u>Laminated</u>				
<u>B-Stage Phenolic-glass</u>				
K5	VOLAN A CTL 91LD		to +525	803
<u>B-Stage Silicone-glass</u>				
K6	F1 30-40		to +500	804
K6a	BASE GF MIL-G-55636		to +250	810
<u>Polyester-glass</u>				
K7	F-141		-	805
<u>Epoxy-glass</u>				
K8	SCOTCHPLY 1002		- 60 to +250	801
K8a	TYPE GEB MIL-P-18177 (NEMA G11)		- 60 to +275	807
K8b	TYPE GEE MIL-P-18177 (NEMA G10)		- 60 to +250	812
K8c	FR45 (NEMA FR-5)		- 60 to +275	814
<u>Laminated, Copper Clad</u>				
<u>Epoxy-glass</u>				
K9	G-11-861-1		- 60 to +275	802
K9a	TYPE GH MIL-P-13949 (NEMA FR-5)		- 60 to +275	808
K9b	TYPE GE MIL-P-13949 (NEMA G-10)		- 60 to +250	811
K9c	TYPE GF MIL-P-13949 (NEMA FR-4)		- 60 to +250	815
K9d	BASE GF MIL-P-55617 (NEMA FR-4)		- 60 to +250	809
K9e	TYPE GB MIL-P-13949 (NEMA G-11)		- 60 to +275	813
K10	MX 6500		to +266	806

PLASTICS (CONT)		TEMP	FILE
<u>DESIGNATION</u>	<u>DESCRIPTION</u>	<u>RANGE</u>	<u>NO</u>
<u>Molding Stock</u>			
<u>ABS</u>			
K10	ROYALITE PR55		1011
<u>Acrylic</u>			
K11	LUCITE	to + 180	1014
K12	PLEX II UVA	- 310 to + 180	1005
<u>Diallyl Phthalate</u>			
K13	DIALL FS-80	+ 425	702
K14	DIALL 52-70-70	+ 350	703
K15	DIALL FS-10	+ 425	704
K16	RX-1360-T	to + 325	701
<u>Epoxy</u>			
K17	EPIALL 1908	+ 350	705
<u>Fluorocarbon</u>			
K18	TEFLON TFE	- 450 to + 500	1001
K19	KEL-F 81	- 400 to + 400	1003
K20	RULON-LD	- 400 to + 500	1016
<u>Polyamide (nylon)</u>			
K21	ZYTEL 101	- 85 to + 170	706
K22	NYLATRON GS		
<u>Polyimide</u>			
K23	VESPEL SP-1	- 320 to + 500	1015
<u>Polypropylene</u>			
K24	5224-100	- 10 to + 200	1010
<u>Polystyrene</u>			
K25	REXOLITE 1422	- 60 to + 150	1009
K26	BAUM X252	165°F	1007
<u>Polyvinyl Fluoride</u>			
K27	KYNAR	- 80 to + 300	1008
<u>Polycarbonate</u>			
K28	LEXAN	- 275 to +250	707

POTTING COMPOUNDS & SEALANTS

(For foamed compounds, see FOAMS)

	<u>DESIGNATION</u>	<u>DESCRIPTION</u>	<u>TEMP RANGE</u>	<u>FILE NO.</u>
	<u>Epoxy, 2-Part</u>			
L1	EPOCAST 3E8028		+ 200	909
L2	EPON 828/Z		-	912
L3	EC1663B/A		+ 500	913
L4	STYCAST 2850 FT/11		+ 300	915
L5	EPON 826/D			
L6	EPOXYLITE 6203		- 75 + 450	917
L7	STYCAST 1090SI Microballoon filled		- 100 + 300	923
L8	STYCAST 1090/11 Black, filled,		- 100 + 400	901
L8a	STYCAST 2850 KT		+ 300	924
	<u>Epoxy-phenolic-urethane</u>			
L9	MARAGLAS A (655/555)		+ 250	916
	<u>Silicone, 2-part R-T cure</u>			
L10	RTV 560 red		- 150 + 400	902
L11	RTV 60 red		- 90 + 500	903
L12	RTV 90 red		- 90 + 500	904
L13	SILASTIC RTV601 white		- 90 + 300	910
L14	SYLGARD 183 black		- 85 + 482	911
L14a	DC-93-500 clear		- 85 + 392	925
L14b	PR-1933 red		- 100 + 500	926
L14c	DC-3145			927
	<u>Silicone 2-part oven cure</u>			
L15	DC XR-6-3501 clear, hard		- 85 + 392	919
	<u>Silicone 1-part</u>			
L16	SILASTIC 731 white		- 85 + 350	914
L17	DC 92-024 gray		- 70 + 600	922
	<u>Thread Sealant</u>			
L18	LOCKTITE A, B, C, E, H		- 65 + 250	918
	<u>Urethane, clear</u>			
L19	PR-1538 amber, translucent		- 70 + 300	908
	<u>Urethane opaque</u>			
L20	PR-1538 Black		- 70 + 300	908
L21	PR-1542 Black or dark amber		- 70 + 300	905

<u>TAPE</u>	<u>DESIGNATION</u>	<u>DESCRIPTION</u>	<u>TEMP RANGE</u>	<u>FILE NO.</u>
<u>Lacing</u>				
M1	TEFGLAS 90LOF 13A Glass/Teflon		to 550°F	1107
M2	721H Nomex-Silicone rubber		to 500°F	1111
M2a	721S Nomex-Silicone resin		to 500°F	1112
<u>Insulation, Electrical, Self-Adhesive</u>				
<u>Teflon back, silicone adhesive</u>				
M3	MYSTIK 7503 6.0 Mil 9KV		- 100 to + 500°F	312
M4	7504 7.0 Mil 11KV		" "	312
M5	7505 7.7 Mil 11KV		" "	312
M6	7510 13 Mil 16KV		" "	312
M7	SCOTCHBRAND #60 3.5 Mil		- 100 to + 500	319
M8	" 61 6.5 Mil		" "	319
M9	" 62 3.5 Mil Bondable		" "	320
M10	TEMP-R-TAPE T 6.0 Mil 10KV		-100 to + 500	310
<u>Teflon/Glass back, silicone adhesive</u>				
M11	TEMP-R-GLAS A2005 5.0 Mil 4KV		- 100 to + 500	311
M12	" A2007 7.0 Mil 5 KV		" "	
M13	" A2008 8.0 Mil 7KV		" "	
M14	" A2012 12.0 Mil 6KV		" "	
<u>Polyester back silicone adhesive, white</u>				
M15	MYSTIK 7300 3.2 Mil 4KV		- 100 to + 266°	309
M16	" 7302 5.0 Mil 7 KV (Special Order)		" "	309
M17	" 7305 7.5 Mil 13KV (Special Order)		" "	309
<u>Kapton back, silicone adhesive</u>				
M18	MYSTIK 7366 5.0 Mil 7.5KV (Double-coated)		- 110 to + 550	318
M18a	TEMP-R-TAPE 350 3.5 Mil 10 KV		- 100 to +500	326
M18b	MYSTIK 7361 Single-coated 3.2 Mil, 8 KV		- 110 to +550	327
<u>Transfer Tape Unsupported</u>				
M19	#465 (3M) 2.0 Mil			324
<u>Aluminum Foil, silicone adhesive</u>				
M20	MYSTIK 7402 4.0 Mil		- 110 to + 550	1103
<u>Thermal Insulating, Reflective, Aluminized 1 Side, Silicone Adhesive</u>				
M21	G102700 Kapton 0.5 Mil (with Oxide)		- 110 to + 530	1110
M22	G103500 Kapton 0.5 Mil (less oxide)		" "	1111
M23	EE6600 Mylar		- 30 to + 300	1109

<u>TUBING</u>	<u>DESIGNATION</u>	<u>DESCRIPTION</u>	<u>TEMP RANGE</u>	<u>FILE NO.</u>
<u>Flexible, electrical insulating</u>				
	N1 TUY-XX	Teflon, clear, medium wall	-300 to + 450	301
	N2 TUZ-XX	Teflon, clear, thin wall	-300 to + 450	301
<u>Flexible, electrical insulating, heat-shrinkable</u>				
	N3 PENNTUBE SMT-II-XX	FEP teflon	-275 to + 400	321
	N4 SILASTIC 1410	silicone rubber	-148 to + 500	205
	N5 THERMOFIT KYNAR		-67 to + 347	325
<u>WIRE AND CABLE</u>				
<u>Wire, Electrical, Insulated, Hookup</u>				
	P1 M16878/E-XX	Teflon std wall	-85 + 392	302
	P2 M16878/ET-XX	Teflon thin wall (TFE)	-85 + 392	307
	P3 M16878/KT-XX	Teflon thin wall (FEP)	-85 + 392	307
	P4 M81381/1	Kapton-FEP wrapped	+392	313
	P5 M81381/2	Kapton-FEP wrapped	+392	314
	P6 M81381/3	Kapton-FEP wrapped	+392	315
	P7 M81381/4	Kapton-FEP wrapped	+392	316
	P8 Surok	TFE insulated	-85 + 392	306
<u>Wire, Electrical Magnet</u>				
	P9 AI-220	Polyamide-imide	to 428°	308
	P10 NYLESE, HEAVY	Urethane-Nylon	to 266°	317
	P11 POLYTHERMALEZE	Polyester-Linear polyester	to 311°	322
	P12 ML MAGNET WIRE	Polyimide	to 428°	323
<u>Cable, Coaxial, R. F.</u>				
	P13 RG-178B/V	50 ohms 0.075" O.D.	-148 + 392	328 U
	P14 RG-188A/V	(S/S by RG-316 A/V) 50 ohms 0.110" O.D.	-148 + 392	329 U
	P15 RG-196A/V	(S/S by RG-178)	-148 + 392	330 U
<u>Cable, Flat Conductor</u>				
	P16 C37-25 C3025H0023	Kapton/FEP laminate	-148 + 392	331

LIST II-M MANUFACTURER'S ADDRESSES

1. AGC Inc.
106 Evansville Av
Meridan Ct 06450
203-235-3361
FSCM 98500
2. Acheson Colloids Co
1635 Washington Av
Port Huron Mi 48060
313-984-5581
FSCM 70079
3. Adhesive Engineering Co
1411 Industrial Rd
San Carlos Ca 94070
415-591-2686
FSCM 17433
4. Applied Plastics Co. Inc
130 Penn St
El Segundo Ca 90266
213-777-2207
FSCM 05866
5. Armstrong Products Co. Inc
P.O. Box 1-C
Warsaw, In 46580
219-267-3226
FSCM 98911
6. Baum Chemical
625 Nash St
El Segundo Ca 90245
213-772-3253
FSCM None
7. Bloomingdale Div
American Cyanamid Co
Havre de Grace Md 21078
301-030-1910
FSCM 07542
- 7a. Brand-Rex Div
American Enka Corp
West Main St
Willimantic Ct 06226
203-423-7771
FSCM 71124
8. CPR Div
Upjohn Co
555 N Alaska Av
Torrance Ca 90503
213-320-3550
FSCM 18975
- 8a. Chomerics, Inc
77 Dragon Ct
Woburn, Ma 01801
617-935-4850
FSCM 18565
9. Coast Mfg & Supply Co
P.O. Box 71
Livermore Ca 94550
415-447-1000
FSCM 91610
10. Connecticut Hard Rubber Co
Subs U.S. Polymeric
407 East St
New Haven Ct 06509
203-777-3631
FSCM 71643
- 10a. Crest Products Co
3010 Halladay St
Santa Ana Calif 92705
FSCM 34469
11. Dixon Corp
386 Metacom Av
Bristol RI 02809
401-253-7500
FSCM 04813
12. Dow Corning Corp
Engineering Products Div
P.O. Box 592
Midland Mi 48640
517-636-8000
FSCM 71984
13. Drilube Co
723 W Broadway
Glendale Ca 91204
213-245-1806
FSCM 06186

- 14. Dupont deNemours E. L. & Co
Film Dept
Nemours Bldg
Wilmington De 19898
302-774-1000
- 14a. DuPont deNemours, E.I. & Co
Plastics Dept
DuPont Bldg
Wilmington De 19898
302-774-1000
FSCM 18873
- 14b. DuPont deNemours, E.I. & Co
Elastomer Chemicals Dept
Nemours Bldg
Wilmington De 19898
302-774-1000
FSCM 18873
- 14c. DuPont deNemours, E.I. & Co
Petroleum Chemicals Div
Nemours Bldg
Wilmington De 19898
302-774-1000
FSCM 18873
- 15. Electrofilm Corp
7111 Laurel Canyon
North Hollywood Ca 91605
213-875-1000
FSCM 85932
- 16. Emerson & Cuming Inc
59 Walpole St
Canton Ma 02021
617-828-3300
FSCM 04552
- 17. Epoxylite Corp
1428 Santa Anita Ave
South Elmonte Ca 91733
213-444-9514
FSCM 11147
- 18. FMC Corp
Organic Chemicals Div
633 Third Av
New York City NY 10017
212-687-7400
FSCM 85974
- 18a. Formica Corp
Subs of Amer. Cyanamid
4614 Spring Grove Av
Cincinnati Oh 45232
513-541-3670
FSCM 80251
- 19. Furane Plastics Inc
5121 San Fernando Rd. W.
Los Angeles Ca 90039
213-245-1151
FSCM 99384
- 20. General Electric Co
Silicone Products Div
Waterford NY 12188
518-237-3330
FSCM 01139
- 21. General Electric Co
Wire & Cable Dept
1285 Boston Av
Bridgeport Ct 06602
203-334-1012
FSCM 24457
- 21a. General Electric
Laminated Products Dept
Coshocton Oh 43812
614-622-5310
FSCM 08801
- 21b. General Latex & Chemical
668 Main St
Cambridge Ma 02139
617-864-7750
FSCM 72701

22. General Tire & Rubber Co
Industrial Products Div
1700 Factory Av
Marion In
FSCM 20030
23. Gore & Associates, W.L. Co
555 Paper Mill Rd
Newark De 19711
302-738-4880
FSCM 17217
- 23a. Hadbar Div
Purolator Products Inc
733 S. Fremont Av
Alhambra Ca 91803
FSCM 07096
24. Haveg Industries Inc
Super Temp Wire Div
Winooski Vt 05404
802-862-9636
FSCM 05973
25. Hitemp Wires
Simplex Cable Corp
1200 Shames Dr
Westbury L.I. NY 11590
FSCM 99114
- 25a. Humiseal Div
Columbia Technical Corp
Woodside N. Y. 11377
212-932-0800
FSCM 99109
26. Illinois Institute of Technology
Research Institute
Technology Center
Chicago Ill 60616
FSCM 30921
27. ITT/Wire & Cable Dept
172 Sterling St
Clinton Ma 01510
617-365-6331
FSCM 90484
28. Independent Ink Co
14705 S. Avalon Blvd
Gardena Ca 90247
213-321-0181
FSCM 12744
29. Isocyanate Products Inc.
900 Wilmington Rd
Newcastle De 19720
302-328-5661
FSCM 07719
30. Johns-Manville
Aerospace Products
22 E 40th St
New York City NY 10016
212-532-7600
FSCM 75165
31. Loctite Corp.
705 N Mountain Rd
Newington Ct 06111
203-278-1280
FSCM 05972
32. Lubeco, Inc
1322 S Alameda St
Compton Ca
213-636-1808
FSCM-None
33. Magna Chemical & Coatings Co
1785 North Eastern Ave
Los Angeles Ca 90032
213-261-7111
FSCM 98795
34. Marblette Corp
37-31 30th St
Long Island City NY 11101
212-784-8100
FSCM 08777
35. Mesa Plastics Div
Allied Chemical
12270A Nebraska Av
Los Angeles Ca 90025
213-272-4471
FSCM 15731

36. Metal Cal Div
Avery Products Corp
422 E. Warren Lane
Inglewood Ca 90309
Now Div of W.H. Brady
FSCM 00544
37. Microseal Products Corp
3216 Raintree Av
S. Torrance CA 90505
FSCM 11664
38. Mystik Tape Div
Borden Chemical Co
1700 Winnetka Av
Northfield IL 60093
312-446-4000
FSCM 88301
39. Narmco Materials Div
Whittaker Corp
600 Victoria St
Costa Mesa CA 92627
714-548-1144
FSCM 04622
See Crest Products
40. NVF Co
Yorklyn, De 19736
302-239-5281
FSCM 43021
41. Nopco Chemical Co
Plastics Div
175 Schuyler Av
North Arlington NJ 07032
FSCM 07812
42. Parker Seal Co
10567 Jefferson Blvd
Culver City Ca 90230
213-839-1161
FSCM 83259
43. Pennsalt Chemicals Corp
3 Penn Center Plaza
Philadelphia Pa 19102
215-564-4700
FSCM 86460
44. Penntube Plastics Co Div
Pennsylvania Fluorocarbon Co Inc
Madison & Holley Sts
Clifton Heights Pa 19018
215-622-2300
FSCM 09795
45. Permacel Div
Johnson & Johnson Inc
U. S. Highway #1
New Brunswick NJ 08903
201-524-0400
FSCM 99742
46. Phelps Dodge Magnet Wire Corp
P. O. Box 600
Ft Wayne In 46801
219-743-0511
FSCM 09040
47. Phoenix Trimming Co.
2000 N. Racine Av
Chicago, Il 60614
312-549-6414
FSCM 86514
48. Polymer Corp
2120 Fairmont Av
Reading Pa 19603
215-929-5858
FSCM 83616
49. Polytron Co
664 S Tenth St
Richmond Ca 94804
415-235-8330
FSCM None
50. Products Research & Chemical Co
2919 Empire Av
Burbank Ca 91504
213-849-3992
FSCM 83574
- 50a Raychem Corp
300 Constitution Dr
Menlo Park Ca 94025
415-324-3333
FSCM 06090
51. Rogers Corp
Main St
Rogers Ct 06263
203-774-9605
FSCM 04394

52. Rohm & Haas
Independence Mall West
Philadelphia Pa 19105
215-592-3000
FSCM 77902
53. Rustoleum Corp
2445 Oakton St
Evanston IL 60204
312-869-1100
FSCM 08882
54. G. T. Schjeldahl
Highway #3
Northfield Mn 55057
507-645-5635
FSCM 07955
55. Scott Paper
Foam Div
1500 E. 2nd St
Chester Pa 19103
215-876-2551
FSCM 78112
56. Shell Chemical Co (1)
Adhesives Dept
P.O. Box 831
Pittsburg Ca 94565
415-685-2310
FSCM 22893
57. Shell Chemical Co.
Plastics & Resins Div
113 W 52nd St
New York City NY 10019
212-262-2140
FSCM 86961
58. Stillman Rubber Div
Electrada Corp
5811 Marilyn Av
Culver City Ca 90230
213-398-5735
FSCM 95272
- 58a Walter Strassburger & Co Inc
180 Madison Av
New York City NY 10016
59. Swedlow Inc
12242 Western Av
Garden Grove Ca 92641
714-893-7531
FSCM 86175
- 59a Synthane Corp
Subs Alco Standard Corp
14 River Rd
Oaks Pa 19456
215-666-5011
FSCM 78397
60. Tempil Corp
132 W 22nd St
New York City NY 10011
212-675-6610
FSCM 82682
61. Tensolite Insulated Wire Corp
Subs of Carlisle Corp
West Main St
Tarrytown NY 10591
FSCM 92607
62. Thiokol Chemical Co
Chemical Div
780 N Clinton Av
Trenton NJ 08607
FSCM 25941
63. Transport Dynamics Div
Lear Siegler Inc
3131 W Segerstrom Av
Santa Ana Ca 92702
714-546-3131
FSCM 09455
64. U.S. Polymeric Inc
Ludlow & Canal St
Stanford Ct 06904
203-324-7545
FSCM 05876
65. Uniroyal Inc
Royalite Plastic Products
2638 N Pulaski Rd
Chicago IL 60639
312-342-1800
FSCM 89616
- (1) Epon Adhesives now produced by:
Hysol Div, The Dexter Corp
2850 Willow Pass Rd
Pittsburg Ca 94565
415-687-4201

66. Velcro Corp
681 Fifth Av
New York City NY 10022
212-751-2144
FSCM 11153
67. Vita-Var Co
46 Albert Av
Newark NJ 07105
FSCM 79103
68. Wakefield Engineering
139 Foundry St
Wakefield Ma 01880
617-245-5900
FSCM 05820
69. Western Filament Corp
4680 San Fernando Rd
Glendale Ca 91204
213-245-7701
FSCM 00768
70. Wornow Process Paint Co (1)
1218 Long Beach Av
Los Angeles Ca 90021
213-627-3773
FSCM 79436
71. 3M Adhesives, Coatings &
Sealers Div
2501 3M Center
St Paul Mn 55101
612-733-1110
FSCM 04963
72. 3M Reflective Products Div
2501 Hudson Rd
St Paul Mn 55101
612-733-1110
FSCM 94960
- (1) Now
Wornow Products Dept
Hysol Div
The Dexter Corp
1218 Long Beach Av
Los Angeles Ca 90021
213-627-3773