

YOUNG CHANG SILICONE CO LIMITED

Room 803, Chevalier House, 45-51 Chatham Road South, Tsim Sha Tsui, Kowloon HK

System Component
STW-B, STW-B-XX

System Designation
YCI-130

System Class
130(B)

Report Date: 2006-11-01

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alternate constructions: [Table V](#)

Construction Details (Table V)

The use of this insulation system is limited to the combination of materials specified below. Where more than one item is designated under insulation function, they may be used together indicated, or they may be used as alternates to one another. Functions designated "optional" are not necessarily required for every design. Insulation thicknesses and/or layers below minimum.

Filament Wire

Additional Ground & Interwinding insulation *is not* required to separate this winding from other windings or between this winding and grounded/dead metal
 Recognized Component Single and Multi-Layer Insulated Winding Wire (OBJT2) listed below
 Recognized Component Appliance Wiring Material (AVLV2) listed below
 Unless otherwise noted, winding wire types listed below may be used in combination within a single product

YOUNG CHANG SILICONE CO LIMITED [E242198] - Recognized Component

STW-B	3.7 (0.09)	Single- and Multi-layer Insulated Winding Wire - C
STW-B-XX	3.7 (0.09)	Single- and Multi-layer Insulated Winding Wire - C

Enameled Wire

Recognized Component - Magnet wire (OBMW2), single build or greater, round or rectangular, copper or aluminum unless stated otherwise for the types listed below
 Ground Insulation is required to separate this winding from grounded/dead metal
 Interwinding Insulation *is* required to separate this winding from other enameled wire
 Unless otherwise noted, Winding Wire types listed below may be used in combination within a single product

<u>ANSI Type</u>	<u>Temp(°C)</u>	<u>Basecoat(Topcoat)</u>
MW 28	and 130°C	Polyurethane (Polyamide)
MW 75	and 130°C	Polyurethane
MW 79	or 155°C	Polyurethane
MW 80	or 155°C	Polyurethane (Polyamide)
MW 82	or 180°C	Polyurethane
MW 83	or 180°C	Polyurethane (Polyamide)

Ground and Interwinding Insulations

any Recognized Component Plastic (QMFZ2), polyethylene terephthalate film (PET) 1 mil

<u>Designation</u>	<u>mils(mm)</u>	<u>comments</u>
<u>3M COMPANY [E17385] - Recognized Component</u>		
1 (a)	1[layers]	
1205	1 (0.03)	
1298 (b)	1[layers]	
1298CR	1[layers]	
1318-1 (a)	1[layers]	
1318-2 (a)	1[layers]	
1350-1 (b)	1[layers]	
1350-2 (c)	1[layers]	
1350CR-1	1[layers]	
1350CR-2	1[layers]	
1350F-1 (b)	1[layers]	
1350F-2 (c)	1[layers]	
1350T-1 (b)	1[layers]	
1350T-2 (b)	1[layers]	
1350T-3 (b)	1[layers]	
1351-1 (a)	1[layers]	
1351-2 (c)	1[layers]	
1351T-1 (a)	1[layers]	
1351T-2 (a)	1[layers]	
1388B-1 (b)	1[layers]	
1388W-1 (b)	1[layers]	
1388Y-1 (b)	1[layers]	
44 (a)	1[layers]	
44-A (a)	1[layers]	
44-T (a)	1[layers]	
44D (a)	1[layers]	
44D-A (a)	1[layers]	
44T-A (a)	2[layers]	
5	1[layers]	
54 (a)	1[layers]	
55	1[layers]	
56 (a)	1[layers]	
57 (a)	1[layers]	
58 (a)	1[layers]	
74 (a)	2[layers]	
75	1[layers]	
Super 10 (a)	1[layers]	
Super 20 (a)	1 (0.03)	
<u>CELANESE INTERNATIONAL CORP [E344082] - Recognized Component</u>		
ZENITE 6130(+)	11.8 (0.3)	
<u>CELANESE INTERNATIONAL CORP [E41938] - Recognized Component</u>		
Rynite FR530(I)(+)(f1), FR530L(I)(+)(f1)	11.8 (0.3)	
<u>DUCK SUNG HITECH CO LTD [E105147] - Recognized Component</u>		
DTS-280	1[layers]	
<u>DuPont Specialty Products USA LLC [E39505] - Recognized Component</u>		
Kapton® 100H, 100HN, 100HN-S, 100H-ZT, 100HN-ZT, 100FPC-ZT, 100TAB-ZT, 100PST, 100HA, 100TN, 100V, 100VN, 100FPC, 100FPC-A, 100HPP-ST	1 (0.03)	

<u>DuPont Specialty Products USA, LLC [E34739] - Recognized Component</u>		
Nomex® 410	2 (0.05)	
Nomex® 411	5 (0.13)	
Nomex® 414	2 (0.05)	
Nomex® 418, 818, 864LAM	2 (0.05)	
Nomex® 992, 992PSB	4 (0.1)	
Nomex® 993, 993PSB	3 (0.08)	
Nomex® 994, 994PSB	3 (0.08)	
Nomex® E56, 356	3 (0.08)	
<u>Dupont Teijin Films</u>		
Mylar	1 (0.03)	polyethylene terephthalate film (PET)
<u>E. I. Dupont de Nemours & Co.</u>		
Kapton H, V, HN, VN or HA Grades	1 (0.03)	
Mylar MO	1 (0.03)	
<u>JINGJIANG JINGYI ADHESIVE PRODUCT CO LTD [E246950] - Recognized Component</u>		
JY25-A (b)	1[layers]	
<u>JINGJIANG YAHUA PRESSURE SENSITIVE GLUE CO LTD [E165111] - Recognized Component</u>		
CT* (b)(g)	1[layers]	
PZ* (b)	2[layers]	
WF* (c)(h)	1[layers]	
<u>METAL LINE CO LTD [E162848] - Recognized Component</u>		
800 (a) *** this product is no longer Recognized ***	3[layers]	
800BT *** this product is no longer Recognized ***	1[layers]	
<u>NITTO DENKO CORP [E34833] - Recognized Component</u>		
3161-FT1 *** this product is no longer Recognized ***	1[layers]	
3161-FT2 *** this product is no longer Recognized ***	1[layers]	
<u>P LEO & CO LTD [E126174] - Recognized Component</u>		
1H860 (f)	1[layers]	
1P130-3 (b) (\$)	1[layers]	
1P350 (e)	1[layers]	
1P756 (h)	1[layers]	
1P801	1[layers]	
1P802	1[layers]	
1P9FR * (a)	1[layers]	
<u>P. Leo</u>		
1P808	1[layers]	
<u>Resonac Corporation [E42956] - Recognized Component</u>		
CP-J-8800, CP-J-NAF, CP-J-F(N) *** this product is no longer Recognized ***	15.7 (0.4)	
<u>Resonac Techno Service Corporation [E514814] - Recognized Component</u>		
CP-J-8800, CP-J-NAF, CP-J-F(N)	15.7 (0.4)	
<u>SUMITOMO BAKELITE CO LTD [E41429] - Recognized Component</u>		
SUMIKON PM-9630	15.7 (0.4)	
SUMIKON PM-9750	15.7 (0.4)	
SUMIKON PM-9820, PM-9825	15.7 (0.4)	
SUMIKON PM-9850	15.7 (0.4)	
<u>SYMBIO INC [E50292] - Recognized Component</u>		
35660 (a)	1[layers]	
35660Y (e)	1[layers]	
35661 (c)	1[layers]	
MY130 (b)	1[layers]	
MY9XAF (g)	1[layers]	
<u>TERAOKA SEISAKUSHO CO LTD [E56086] - Recognized Component</u>		
560S #2	1 (0.03)	
560S #3	1[layers]	
560S #5 *** this product is no longer Recognized ***	1[layers]	
630F #25 (a)	1[layers]	
630F2 #50 (i) *** this product is no longer Recognized ***	1[layers]	
631S #25, 632S #25 (a)	1[layers]	
631S #38 (d) *** this product is no longer Recognized ***	1[layers]	
631S2 #50, 632S2 #50 (a) *** this product is no longer Recognized ***	1[layers]	
650S #25	1[layers]	
650S #50	1[layers]	
652S #25	1[layers]	
<u>Toray Industries</u>		
Lumirror S10	1 (0.03)	

Lead Wires

lead wires are optional for this system

Temp	Insulation
105°C	CPE - chlorosulfonated polyethylene +
150°C	SR - silicone rubber(with or without braid)
150°C	Perfluoro-alkyl vinyl ether/Al/PET/EVA
150°C	XLPE - crosslinked polyethylene
200°C	SR - silicone rubber(with or without braid)
200°C	PTFE - polytetrafluoroethylene

+ To be isolated from direct contact with windings (magnet wire) by any insulating material (tape, layer insulation, sleeving,etc.) listed in this table - unless specifically exclude requirement by a special note at the beginning of this table.

Minor Sheet Materials

(layer, outer, wrap etc.) minor sheet is optional for this system

Designation	comments
<u>Dupont -Teijin Films</u>	
Polyethylene Terephthalate Film	
<u>DuPont Specialty Products USA, LLC [E34739] - employing Recognized materials</u>	
Nomex® 410	
Nomex® 411	

Nomex® 414
Nomex® 416, 416 LAM
Nomex® 418, 818, 864LAM
Nomex® 992, 992PSB
Nomex® 993, 993PSB
Nomex® 994, 994PSB
Nomex® E56, 356

E. I. Dupont de Nemours & Co.
Kapton Grades H, V, HN, VN and HA
Nomex® 424
Nomex® 425

any sheet insulation or tape described in this table with no minimum thickness requirement may be used as a minor sheet material

Tapes

tapes are optional for this system

Designation

comments

3M COMPANY [E17385] - Listed or Recognized Component

1 (a)
1205
1298 (b)
1298CR
1318-1 (a)
1318-2 (a)
1350-1 (b)
1350-2 (c)
1350CR-1
1350CR-2
1350F-1 (b)
1350F-2 (c)
1350T-1 (b)
1350T-2 (b)
1350T-3 (b)
1351-1 (a)
1351-2 (c)
1351T-1 (a)
1351T-2 (a)
1351T-3 (a)
1388B-1 (b)
1388W-1 (b)
1388Y-1 (b)
44 (a)
44-A (a)
44-T (a)
44D (a)
44D-A (a)
44T-A (a)
5
54 (a)
55
56 (a)
57 (a)
58 (a)
69 (a), 9 (a)
74 (a)
75
92
MR 94
MR 94B (c)
Super 10 (a)
Super 20 (a)

BONDTEC PACIFIC CO LTD [E175868] - Listed or Recognized Component

201 (c)
370S (b)
371F (a) *** this product is no longer Recognized ***

CHYUN YIH TAPE CO LTD [E81174] - Listed or Recognized Component

PB416C
PB416F

DUCK SUNG HITECH CO LTD [E105147] - Listed or Recognized Component

220-B
DTS-204 (h)
DTS-241

Hyun Dai
800BT

INTERTAPE POLYMER GROUP [E20780] - Listed or Recognized Component

4426-00 (41)*
4427-00 (415)*
51560-08 (a)
51578 (415SA)*
51580-00 (40)* (b)
51587-04*
51588 (50)*
51589-00*
51589-04*
51595* (b)
51596* (b)
54113

Intertape Polymer Group (Tesa, Tuck, Spinnaker)

51587-17
51589-17
51594-17

polyester film
polyester film

JINGJIANG JINGYANG INSULATING PRODUCT CO LTD [E309872] - Listed or Recognized Component JY-133

JINGJIANG JINGYI ADHESIVE PRODUCT CO LTD [E246950] - Listed or Recognized Component
JY25-A (b)

JINGJIANG YAHUA PRESSURE SENSITIVE GLUE CO LTD [E165111] - Listed or Recognized Component

CT* (b)(g)
CT* (c)(g)
PZ* (b)
WF* (c)(h)

Meixin New Material Co Ltd [E304309] - Listed or Recognized Component

MXAL-110.210 * this product is no longer Recognized *****
MXCU-110.210 * this product is no longer Recognized *****
MXPI-310F.310.312

METAL LINE CO LTD [E162848] - Listed or Recognized Component

800 (a) * this product is no longer Recognized *****

NITTO DENKO CORP [E34833] - Listed or Recognized Component

3161-FT1 * this product is no longer Recognized *****

3161-FT2 * this product is no longer Recognized *****

31C

343B

343BN@ (a) * this product is no longer Recognized *****

P Leo & Co (B.C) Ltd

1E075
1K7172
1P130
1P808
1P830
1P9FR
1PN2R

silicone adhesive, polyimide film
acrylic adhesive, polyester film
polyester film
acrylic adhesive, polyester film

P LEO & CO LTD [E126174] - Listed or Recognized Component

1A025

1A570 * this product is no longer Recognized *****

1C822 * this product is no longer Recognized *****

1G006

1G130 (o)

1G155

1G180

1G200

1H818 (m)

1H850 Black (q)

1H850 Natural (o)

1H860 (f)

1H86A (o)

1H86R (g)

1K063

1K7170

1K7171A

1N008

1N012

1P135 (c) * this product is no longer Recognized *****

1P350 (e)

1P656 (d)

1P700 (b)

1P756 (h)

1P801

1P802

1P802 (k)

1P833 xx (@)

1PEN2

1PEN3

1PN820 (o)

1PN828 (o)

Saint-Gobain Performance Plastics Corp.

K102

K104

acrylic adhesive, polyimide film
silicone adhesive, polyimide film

SYMBIO INC [E50292] - Listed or Recognized Component

35660 (a)

35660Y (e)

35661 (c)

KA180L

MY130 (b)

MY9XAF (g)

TAE HWA INDUSTRIAL CO LTD [E92677] - Listed or Recognized Component

6701

E-3338

H-2715

H-5673 (+)

H-5673N

S-9101

TH-GC012, S-2115

Taehwa Industries

A-9025

C-3310

E-3338

S-2115

TERAOKA SEISAKUSHO CO LTD [E56086] - Listed or Recognized Component

560S #2

560S #3

560S #5 * this product is no longer Recognized *****

630F #25 (a)

630F2 #50 (i) * this product is no longer Recognized *****

631S2 #50, 632S2 #50 (a) * this product is no longer Recognized *****

650S #50

Young Woo
YT-130A
YT-605B

Core tubes and Bobbins

(for mechanical support only) cores are optional for this system

Designation

comments

CELANESE INTERNATIONAL CORP [E41938] - employing Recognized materials
Rynite FR530(l)(+)(f1), FR530L(l)(+)(f1)
Zytel 101(r9)(f1), 101F(r9)(f1), 101L(r9)(f1), E101(r9)(f1), E101L(r9)(f1)
Zytel 103FHS(+), 103HSL(+), RN5077E(+), E103HSL(+)
Zytel 70G13L
Zytel 70G30HSL, 70G30HSLR
Zytel 70G33HS1L(+)
Zytel 70G33L(+)
Zytel FR50(+)(f1)

CHANG CHUN PLASTICS CO LTD [E59481] - employing Recognized materials
LONGLITE 4115(f1)
LONGLITE 4130
LONGLITE T-355J, T355J
LONGLITE T353 *** materials are no longer Recognized ***
LONGLITE T373J
LONGLITE T375HF
LONGLITE T375J(G5)(G6)
T200NA
T220NA

Changyuan Electronics (Shenzhen) Co Ltd
CB-HFT
Changbao102

Dongguan Chanjie Metal Plastic Product Co., Ltd.
11L
30L

Hexion Specialty Chemicals GMBH
PF2736 (a) (b)

Hitachi Chemical Co Ltd
CD-F-800
CP-J-8600
CP-J-8700
CP-J-8800

Kingfa
PBT-RG301

Kolon Industries
KP212V0

Nan Ya Plastics (Hui Zhou) Corp LTD
1403G5G

NAN YA PLASTICS (HUI ZHOU) CORP LTD [E235269] - employing Recognized materials
1403G1
1403G2
1403G3
1403G4
1403G6

Samsung Fine Chemicals
KB40 (B)M

SUMITOMO BAKELITE CO LTD [E41429] - employing Recognized materials
SUMIKON AM-1130, AM-113
SUMIKON PM-9630
SUMIKON PM-9720
SUMIKON PM-9750
SUMIKON PM-9820, PM-9825
SUMIKON PM-9830

SUMITOMO CHEMICAL CO LTD [E249884] - employing Recognized materials
SUMIKASUPER E4008(c4)(c2)(c3)(j)

TORAY INDUSTRIES INC [E41797] - employing Recognized materials
1494

any material described in this table with no thickness requirement may be used as a spacer or a wedge

tubing and Sleaving

tubing and sleaving are optional for this system

Designation

comments

Changyuan Electronics Group Co Ltd
CB-TT

CHANGYUAN ELECTRONICS GROUP CO LTD [E180908] - Recognized Component
CB-TT-T

DOW Corning
SYLGARD 160A&B
SYLGARD 170A&B

Essex Furukawa Magnet Wire Japan Co., Ltd. [E58401] - Recognized Component
PI-Tube, PIT-S

GREAT HOLDING INDUSTRIAL CO LTD [E156256] - Recognized Component
TFL
TFS
TFT

NIKKAN INDUSTRIES CO LTD [E55258] - Recognized Component
S-693F-1
NIKKAN INDUSTRIES CO LTD [E72406] - Recognized Component

S-693-600

NISSEI ELECTRIC CO LTD [E67922] - Recognized Component
RSU-1

Nissei Electric Co., Ltd
RSU-2

P LEO & CO LTD [E176865] - Recognized Component
2T-TFL-xx.x (a)
2T-TFS-xx.x (a)

SHENZHEN WOER HEAT-SHRINKABLE MATERIAL CO LTD [E203950] - Recognized Component
RSFR-H
WF

SUMITOMO ELECTRIC FINE POLYMER INC [E48762] - Recognized Component
811 or Sumitube F2 *** this product is no longer Recognized ***
940 or SUMITUBE F2(Z) or SUMITUBE T82

SUMITOMO ELECTRIC FINE POLYMER INC [E75077] - Recognized Component
851 or SUMITUBE F4
942 or SUMITUBE F4(Z)

Tie Cords

tie cords are optional for this system

Designation	comments
<u>Various Manufacturers</u> Uncoated fiberglass	

Potting Compounds

potting compounds are optional for this system

Designation	comments
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Chem Tech
ES-928P
ES905
SHA-101D

DONG GUAN SHI PAI HUA CHUANG MATERIAL FTY [E304477] - employing Recognized materials
808A/B

Dow Corning
SE 1816 CV

Dow Silicones Corp [E40195] - employing Recognized materials
SYLGARD 170#
SYLGARD SYLGARD 160

Fong Young Chemical Co., Ltd.
E-536A/H-536B
E-759/H-759
E532-1A/H532-1B

HUNG SHIUNG ENTERPRISES CO LTD [E180899] - employing Recognized materials
F205-A/H042

MOMENTIVE PERFORMANCE MATERIALS JAPAN L L C [E56745] - employing Recognized materials
TSE3331(d)
TSE3331K(y)

Shenzhen Bonic Science & Technology Ltd.
527
707
8580
BN160

Sung Moon Telecommunication
UNIBOND-812

Sung Woo Chemical Corp.
SW-150H
SW-160
SW-300
SW-850HF
SW-860HF

WUXI HENGFENG ELECTRONIC PRODUCTS CO LTD [E256378] - employing Recognized materials
HF-28P-Z1, Z2, Z3 *** materials are no longer Recognized ***

Varnishes

varnishes are optional for this system

Designation	comments
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ELANTAS PDG, Inc. [E75225] - Recognized Component
468-2 (d), 468-2FC (d), 468-2-7-xxF (d), 468-2-7FC-xxF (d)
V1630, V1630FS, V1630FS50, V1630FS Black, 80361, 80361FS

John C Dolph Co [E317427] - Recognized Component
AC-43, EB-43-HG, EB-43-FB, AC-43-66, EG-43/698-D, EG-43/759-D, ER-43/368-D, EB
43/387-D
BC-356, BC-359, PDR-1695, BB-359FR, BB-359MS, BC-359/569-D

NOROO PAINT & COATINGS CO LTD [E93947] - Recognized Component
DVB-2085(*)

VON ROLL USA INC [E73348] - Recognized Component
712#
714#

"Permafil" or "Damisol"

Miscellaneous Minor Insulations

miscellaneous minor insulations are optional for this system

Designation	comments
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CHANG CHUN PLASTICS CO LTD [E59481] - employing Recognized materials

LONGLITE T357
LONGLITE T375J(G5)(G6)
LONGLITE T399J
T200NA
T220NA

Chem Tech

ES-928P
ES905
SHA-101D

Adhesive

DuPont Specialty Products USA, LLC [E34739] - employing Recognized materials

Nomex® 410
Nomex® 411
Nomex® 414
Nomex® 416, 416 LAM
Nomex® 418, 818, 864LAM
Nomex® 992, 992PSB
Nomex® 993, 993PSB
Nomex® 994, 994PSB

E. I. Dupont de Nemours & Co.

Kapton H
Kapton HA
Kapton HN
Kapton V
Kapton VN
Nomex 424
Nomex 425
Nomex E56A

Hitachi Chemical

CP-J-8600
CP-J-8700
CP-J-8800

KUO SEN ENTERPRISE CO LTD [E239105] - employing Recognized materials

EP141FR

Noroo Paint & Coatings

DEM-1000
DEM-1001
DEM-1002
DEM-1003

Adhesive
Adhesive
Adhesive
Adhesive

SUMITOMO BAKELITE CO LTD [E41429] - employing Recognized materials

SUMIKON AM-1130, AM-113
SUMIKON PM-9630
SUMIKON PM-9720
SUMIKON PM-9750
SUMIKON PM-9820, PM-9825
SUMIKON PM-9830
SUMIKON PM-9850