

**YOUNG CHANG SILICONE CO LIMITED**

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

System Component  
STW-F-xx, STW-F-SB-xx

System Designation  
YCI-155

System Class  
155(F)

Report Date: 2021-10-28

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alternate constructions: [Table III](#) ▾

**Construction Details (Table III)**

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.

Note: Note: Insulated winding wires designated STW-F-xx, STW-F-SB-xx are suitable for use in this insulation system without additional ground or interwinding insulation

**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-F-xx, STW-F-SB-xx** 3.9 (0.1)

**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>
<b>MW 30</b>	or 180°C	Polyester-amide-imide
<b>MW 35</b>	or 200°C	Polyester-amide-imide (Polyamide-imide)
<b>MW 36</b>	or 200°C	Polyester-amide-imide (Polyamide-imide)
<b>MW 37</b>	or 220°C	Polyester (Polyamide-imide)
<b>MW 38</b>	or 220°C	Polyester (Polyamide-imide)
<b>MW 73</b>	or 200°C	Polyester-amide-imide (Polyamide-imide)
<b>MW 74</b>	or 200°C	Polyester-amide-imide
<b>MW 76</b>	or 180°C	Polyester-amide-imide (Polyamide)

**Ground and Interwinding Insulations**

<u>Designation</u>	<u>mils(mm)</u>	<u>comments</u>
<u>CELANESE INTERNATIONAL CORP [E344082] - Recognized Component</u> <b>ZENITE 7130</b>	11.8 (0.3)	
<u>DuPont Specialty Products USA LLC [E39505] - Recognized Component</u> <b>Kapton® 100H, 100HN, 100HN-S, 100H-ZT, 100HN-ZT, 100FPC-ZT, 100TAB-ZT, 100PST, 100HA, 100TN, 100V, 100VN, 100FPC, 100FPC-A, 100HPP-ST</b>	1 (0.03)	
<u>E I DUPONT DE NEMOURS &amp; CO INC [E41938] - Recognized Component</u> <b>Rynite FR530(I)(+)(f1), FR530L(I)(+)(f1)</b>	15 (0.38)	
<b>Zytel HTNFR52G30LX</b>	15 (0.38)	
<b>Zytel HTNFR52G30NH(r6)</b>	15 (0.38)	
<u>E. I. Dupont de Nemours &amp; Co.</u> Kapton CR	1 (0.03)	
Kapton HN	1 (0.03)	
<u>P LEO &amp; CO LTD [E126174] - Recognized Component</u> <b>1K063</b>	1 [layers]	
<b>1K063CR</b>	1 [layers]	
<b>1K1CR</b>	1 [layers]	
1K63A *** this product is no longer Recognized ***	1 [layers]	
<b>1K7170</b>	1 [layers]	
1K7177 *** this product is no longer Recognized ***	1 [layers]	
<b>1K7178</b>	1 [layers]	
<b>1K7200</b>	1 [layers]	
<b>1K7220</b>	1 [layers]	
<b>1KPST</b>	1 [layers]	
<b>1PEN2</b>	1 [layers]	
<b>1PEN3</b>	1 [layers]	
<b>1PN2R</b>	1 [layers]	
<b>1PS25</b>	1 [layers]	
<u>P. Leo</u> 1K717	1 [layers]	
<u>SUMITOMO BAKELITE CO LTD [E41429] - Recognized Component</u> <b>SUMIKON PM-9630</b>	11.8 (0.3)	
<b>SUMIKON PM-9820, PM-9825</b>	11.8 (0.3)	
<u>SUMITOMO CHEMICAL CO LTD [E249884] - Recognized Component</u> <b>SUMIKASUPER E4008(c4)(c2)(c3)(f2)</b>		
<u>TOYOBO FILM SOLUTIONS LIMITED [E206562] - Recognized Component</u> Teonex Film Q(I)(m), NQ(I)(m), K(I)(m) *** this product is no longer Recognized ***	1 (0.03)	

**Lead Wires**

lead wires are optional for this system

<u>Temp</u>	<u>Insulation</u>
125°C	XLPE - crosslinked 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 Perfluoro-alkyl vinyl ether/AI/PET/EVA

+ 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

Dupont -Teijin Films  
 Teonex Q51

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

**Nomex® 410**  
**Nomex® 411**  
**Nomex® 414**  
**Nomex® 418, 818, 864LAM**  
**Nomex® 464, 464 LAM**

P\_Leo  
 PB-2

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

**10 (a)**  
**1350Y-1 (b)**  
**1350Y-2 (c)**  
**Super 10 (a)**

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

**CT\* (b)(g)**  
**CT\* (c)(g)**  
**PF\* (d)(g)**  
**WF\* (c)(h)**

P\_Leo & Co (B.C) Ltd

1E035  
 1E040  
 1E075  
 1K7172  
 1N464  
 1P130  
 1P830  
 1P9FR  
 1PETS  
 1PN3R

silicone adhesive, polyimide film

acrylic adhesive, polyester film  
 acrylic adhesive, polyester film

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

**1A022**  
**1A024**  
**1A025**  
 1A570 \*\*\* this product is no longer Recognized \*\*\*  
 1AA02 \*\*\* this product is no longer Recognized \*\*\*  
 1AA03 \*\*\* this product is no longer Recognized \*\*\*  
**1C821**  
 1C822 \*\*\* this product is no longer Recognized \*\*\*  
 1E070 \*\*\* this product is no longer Recognized \*\*\*  
**1G006**  
**1G015**  
**1G015A**  
**1G027A**  
**1G08S**  
**1G130 (o)**  
**1G180**  
 1G18S \*\*\* this product is no longer Recognized \*\*\*  
**1G200**  
**1G20B**  
**1G20H**  
**1G22A**  
**1H818 (m)**  
**1H850 Black (q)**  
**1H850 Natural (o)**  
**1H860 (f)**  
**1H866 (g)**  
**1H86A (o)**  
**1H86R (g)**  
**1K062**  
**1K063**  
**1K063CR**  
**1K06A**  
**1K125**  
**1K1CR**  
**1K220**  
 1K63A \*\*\* this product is no longer Recognized \*\*\*  
**1K7170**  
**1K7171A**  
 1K7177 \*\*\* this product is no longer Recognized \*\*\*  
**1K7177A**  
**1K7178**  
**1K7200**  
**1KLMN**  
**1KPST**  
**1N008**  
**1N012**  
**1N020**

[1N030](#)  
[1N155](#)  
[1N410](#)  
[1P133 \(f\)](#)  
[1P135 \(c\) \\*\\*\\* this product is no longer Recognized \\*\\*\\*](#)  
[1P316 \(a\)](#)  
[1P350 \(e\)](#)  
[1P656 \(d\)](#)  
[1P700 \(b\)](#)  
[1P701 \(b\)](#)  
[1P702 \(b\)](#)  
[1P703](#)  
[1P705](#)  
[1P707 \(b\)](#)  
[1P717 \(b\)](#)  
[1P756 \(h\)](#)  
[1P801](#)  
[1P802](#)  
[1P802 \(k\)](#)  
[1P802B](#)  
[1P833 xx \(@\)](#)  
[1PEN2](#)  
[1PEN3](#)  
[1PFRS \\*\\*\\* this product is no longer Recognized \\*\\*\\*](#)  
[1PG880 \(o\)](#)  
[1PG887 \(o\)](#)  
[1PN820 \(o\)](#)  
[1PN828 \(o\)](#)  
[1PPSS](#)  
[1PS25](#)  
[1PS2A](#)  
[1PS2S](#)  
[1TF08](#)  
[1TT02](#)

## Core tubes and Bobbins

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

Designation	comments
<a href="#">CHANG CHUN PLASTICS CO LTD [E59481] - employing Recognized materials</a> <a href="#">LONGLITE T375J(G5)(G6)</a>	
<a href="#">E I DUPONT DE NEMOURS &amp; CO INC [E41938] - employing Recognized materials</a> <a href="#">Rynite 530 (f1) (+), 530L (f1) (+)</a> <a href="#">Zytel 70G30HSL, 70G30HSLR</a> <a href="#">Zytel 70G30L</a> <a href="#">Zytel 70G33HS1L(+)</a> <a href="#">Zytel 70G33L(+)</a> <a href="#">Zytel FR50(+)(f1)</a>	
<a href="#">Various Manufacturers</a> Recognized Component (QMTS2), ANSI Grade FR-4, Epoxy Resin Coated Copper Foil,	

## Tubing and Sleeving

tubing and sleeving are optional for this system

Designation	comments
<a href="#">P LEO &amp; CO LTD [E176865] - Recognized Component</a> <a href="#">2S1yy-xx.x (a)</a> <a href="#">2T-TFL-xx.x (a)</a>	
<a href="#">P LEO &amp; CO LTD [E195829] - Recognized Component</a> <a href="#">2R-SG# *** this product is no longer Recognized ***</a> <a href="#">2R-SG-1# *** this product is no longer Recognized ***</a>	
<a href="#">P. Leo &amp; Co Ltd</a> <a href="#">2R300</a>	
<a href="#">SUMITOMO ELECTRIC FINE POLYMER INC [E48762] - Recognized Component</a> <a href="#">811 or Sumitube F2 *** this product is no longer Recognized ***</a> <a href="#">SUMITUBE F32</a>	

## Potting Compounds

potting compounds are optional for this system

Designation	comments
<a href="#">Dow Corning</a> <a href="#">SE9188</a>	
<a href="#">ELANTAS PDG, Inc. [E100866] - employing Recognized materials</a> <a href="#">ELAN-Cast® E 471-5LL, E 471-5LL-HV, ELAN-Cast E 700 / C 700</a>	
<a href="#">SHIN-ETSU CHEMICAL CO LTD [E48923] - employing Recognized materials</a> <a href="#">KE-402(s) *** materials are no longer Recognized ***</a>	

## Varnishes

varnishes are optional for this system

Designation	comments
<a href="#">Showa Denko Materials Co., Ltd. [E72979] - Recognized Component</a> <a href="#">WP-2952, WP-2952F-5, WP-2952F-11, WP-2952F-5(FC)</a> <a href="#">WP-2952F-2G, WP-2952F-2G(Y), WP-2952F-2G(YL), WP-2952F-2G (YS), WP-2952F-2G(FC), WP-2952F-2G(H), WP-2952F-2G(K)</a>	