

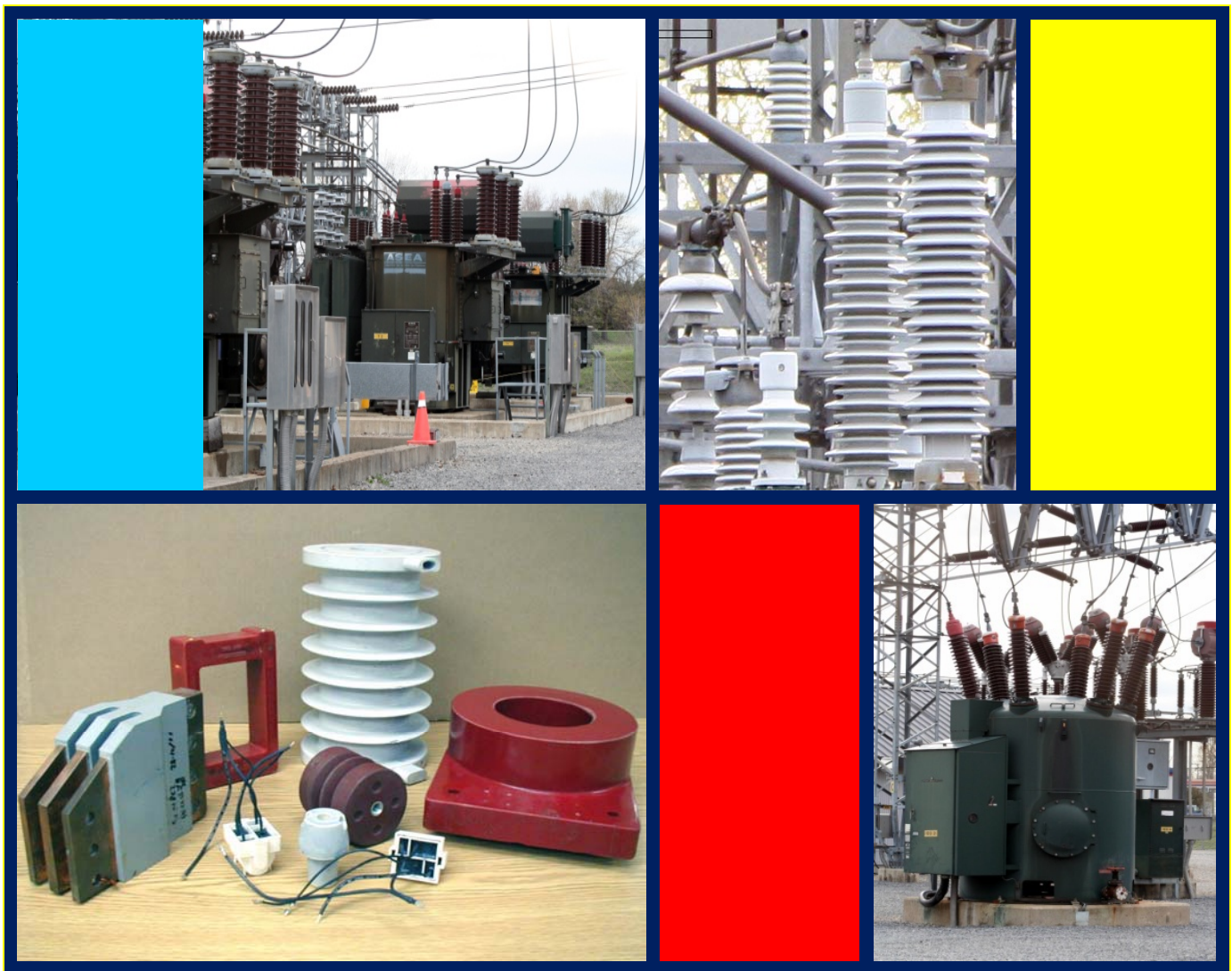
Le Groupe



# Electrical

## Urethane & Epoxy, 2 Components

Bonding, Casting, Coating, Encapsulating and Mold Release



Making The Right Choice



## TABLE OF CONTENT

***Introduction***

***Selection Table***

***Epoxy - Technical Data Sheets***

EP-0042GY .....	1
EPN-850 .....	3
EPN-0853M .....	5
E-1097 .....	7
E-1199M .....	9
E-1928 .....	11
E-3557 .....	13
E-3795 .....	15
E-3797 .....	17
E-3886 .....	19
E-3916 .....	21
1205-T .....	23
1207 .....	25
1208 .....	27
1208S .....	29
1209 .....	31
1221 .....	33
1247 .....	35
1249 .....	37
1260 .....	39
1290 .....	41
1296 .....	43
L-1635 .....	46
L-1763 .....	48

***Urethane - Technical Data Sheets***

EP-0056 .....	50
U82000 .....	52
U82005 .....	54
U82030 .....	56
U82051 .....	58

***Mold Release - Technical Data Sheets***

SPN-0311 .....	60
EMR-600 .....	61



## **Introduction**

*Tri-Tex* presents in this document a selection of epoxy and urethane products developed and used by its customers. We are not limited to this selection and other systems are available. In the event your application is not covered, do not hesitate to contact *Tri-Tex* or your appointed Technical Representative.

*Tri-Tex* has formulated and manufactured a wide variety of resins and hardeners; therefore offering a range of products to suit your needs. Each adhesive has its own characteristics such as working time, viscosity, mixing ratio, flexibility and more.

To help you identifying the system adapted to your operation, a selection table is part of this document.

***Electrical Adhesives for Bonding, Casting, Coating, Dipping, Encapsulating & Potting***

Family	Product number	PROCESS								FLEXIBILITY			FLAME RETARDANT			GENERAL DATA								
		Casting	Encapsulating	Potting	Coating	Adhesive	DIPPING/FIL.WINDING	Mold Release	THERMAL SHOCK RESISTANCE (flexibility)	HIGH HEAT RESISTANCE (Dissipation)	RIGID POTTING	RIGID FAST SETTING	UL94V0	ASTM D-635	FALME OUT	Cycloaliphatic	Hardness Shore A/D	Low Exotherm	Low Shrinkage	Mixing Ratio (WEIGHT)	Mixing Ratio (VOLUME)	Viscosity (cps)	Gel Time (min)	Color
Epoxy	EP-0042	X									X						80D			100/7	100/13		107g at 135C=3	grey
	EPN-850	X						X									85D	X	X	100/22	100/42	3500	488g at 121C=60	grey
	EPN-853M	X						X									85D	X	X	100/30	100/47		454g at 125C=55	grey
	E-1199M	X						X									85D	X	X	100/30	100/47	8000	390g at 125C=30	grey
	E-1097	X						X									87D	X	X	100/10	100/12		454g at 125C=120	red
	E-1928			X													82D			100/43	100/50	1500	454 at 25C=90	black
	E-3557	X						X									85D	X	X	100/22	100/42	3500	488g at 121C=60	grey
	E-3797	X						X									85D	X	X	100/100	100/100	15000	454g at 125C=18	grey
	E-3795	X						X												100/54	100/71	350	150 at 25C=420	amber
	E-3886	X						X									85D	X	X	100/100	100/94	17500	454g at 125C=18	grey
	E-3916	X						X	X								90D	X	X	100/100	100/90	30000	454g at 120C=30	black
	1205T	X						X			X						87D	X	X	100 : 14	100 : 23	5500	65	Black
	1207	X						X			X						88D			100 : 16	100 : 19	1650	27	Clear
	1208	X		X	X	X			X								86D	X	X	100 : 13	100 : 21	1750	90	Black
	1208S	X		X	X	X			X								86D	X	X	100 : 18	100 : 29	1750	125	Black
	1209	X		X	X	X			X								80D	X	X	100 : 28	100 : 50	4000	180	Black
	1221	X		X	X	X			X								87D	X	X	100 : 25	100 : 39	8000	200	Black
	1247			X					X								88D	X	X	100 : 10		5000	100	Black
	1249			X					X								88D	X	X	100 : 100	100 : 100	24500	31	Blue
	1260	X				X			X								75D	X	X	100 : 35	100 : 43	300	720	Clear
1290			X	X												80D			100 : 44	100 : 50	85000	27	Blue	
1296			X	X	X			X								90D			100 : 10	100 : 17	4500	190	Black	
L 1635			X	X				X	X							64D			ONE COMPONENT		950	40	Amber	
L 1763							X									83D	X	X	100 : 50	100 : 50	1050000	270	Green	
EP-0056	X							X								85D	X	X	100:44	100:50	5 000	30	red	
U82000			X					X								89A	X	X	100 : 15		3500	45	Black	
U82005			X					X								70A	X	X	100 : 39	100 : 30	700	27	Yellow	
U82030			X					X		X						84D	X	X	100 : 28	100 : 35	3250	16	Black	
U82051			X					X								70D	X	X	100 : 22	100 : 27	5000	7	Grey	
SPN-0311								X																
EMR-600								X																

Urethane

Mold Release

***Tri-Tex***  
*co inc.*



***EPOXY***

***Technical Data Sheets***



## EP-0042 GY A/B CASTING EPOXY

Version 2007

### PRODUCT TYPE:

**Formulated epoxy Adhesive.**

### SUGGESTED USES:

EP-0042 GY A/B is a grey coloured casting epoxy resin, which is a semi solid at room temperature. It flows freely at 86 deg. F.

EP-0042 GY A/B exhibits when cured excellent mechanical strength, excellent resistance to elevated temperature, good resistance to water and chemicals, and good electrical properties at both room and elevated temperatures.

### PHYSICAL PROPERTIES & GENERAL INFORMATION:

	PART A	PART B	Mixed
Colour	<b>Grey</b>	<b>Clear</b>	<b>Grey</b>
Viscosity (cps)	<b>90000-110000 @ 25°C</b>	<b>8-12 @ 25°C)</b>	
%Solids by weight	<b>100 %</b>	<b>100 %</b>	<b>100 %</b>
Cleaner	<b>S-0001</b>	<b>S-0001</b>	<b>S-0001</b>
Density (kg/lt)	<b>1.8</b>	<b>0.984</b>	<b>1.7</b>
Mix ratio by weight	<b>100</b>	<b>7</b>	
Pot life (135°C, 107 g)			<b>3-4 minutes</b>
Cure schedule			<b>3-4 hours 150°C</b>

### OPERATING CONDITIONS:

EP-0042 GY A/B is used for potting and encapsulating. Use standard equipment and standard procedure for making castings.

**Bring the part A to 70-75°C and keep the part B at room temperature. Mix A/B for 1-2 minutes, cast in a mould and cure in an oven at 130-150°C.**

**Keep in cool dry place, away from flame and oxidizing chemicals. The storage life is at least one year.**

PHYSICAL PROPERTIES OF CURED EP-0042 GY

PROPERTIES	APPLICABLE ASTM STD	VALUE
Hardness, shore D	<b>D-2240</b>	<b>75-85</b>
Dielectric constant 1000HZ, 30 C	<b>D-150</b>	<b>4.1 - 4.5</b>
Dielectric strength (V/mil. 1/8")	<b>D-149</b>	<b>400</b>
Volume resistivity (ohm-cm)	<b>D-257</b>	<b>5.0 - 5.5 x 10<sup>14</sup></b>
Coefficient of thermal expansion (86-194 deg F)		<b>-6 25 - 35 x 10</b>
Heat distortion (deg F , 264 PSI)	<b>D-648</b>	<b>230 - 239 F</b>
COMPRESSIVE STRENGTH (PSI)	<b>D-695</b>	<b>20000-25000</b>
TENSILE STRENGTH ( PSI)	<b>D-638</b>	<b>10000-12000</b>
Moisture absorption, (24 hrs immersion)	<b>D-570</b>	<b>0.10 - 0.20 (in percent)</b>
FLEXURAL STRENGTH (PSI)	<b>D-790</b>	<b>18000-22000</b>
Impact strength izod	<b>D-256</b>	<b>1-1.3 Ft-Lb</b>
Flammability per UL94		<b>225 sec</b>
High Voltage Low Current Arc resistance	<b>D-495-94</b>	<b>194 sec</b>
Inclined Plane Tracking	<b>D-2303-95</b>	<b>&gt;600 minutes</b>

PRECAUTION

**Use good personal hygiene. Store material in a cool, dry place. Shelf life is one year in original sealed container. Consult the Material Safety Data Sheet for further cautionary information.**



## EPN-0850 A/B CASTING EPOXY

Version 2007

PRODUCT TYPE:

**Formulated epoxy Adhesive.**

SUGGESTED USES:

**EPN-0850 A/B is a grey coloured, filled, low temperature heat curing Epoxy resin system.**

**EPN-0850 A/B exhibits when cured excellent mechanical strength, excellent resistance to elevated temperature, good resistance to water and chemicals, and excellent electrical properties at both room and elevated temperatures.**

PHYSICAL PROPERTIES & GENERAL INFORMATION:

	PART A	PART B	Mixed
Colour	<b>Grey</b>	<b>Clear-Amber</b>	<b>Grey</b>
Viscosity (cps)	<b>80000-100000 @ 55°C</b>	<b>50 – 200 @ 25°C</b>	<b>3000-4000 cps</b>
%Solids by weight	<b>100 %</b>	<b>100 %</b>	<b>100 %</b>
Cleaner	<b>S-0001</b>	<b>S-0001</b>	<b>S-0001</b>
Density (kg/l)	<b>1.937</b>	<b>1</b>	<b>1.77</b>
Mix ratio by weight	<b>100</b>	<b>22</b>	
Mix ratio by volume	<b>100</b>	<b>42</b>	
Pot life (121°C, 488 g)			<b>45-75 Min</b>
Cure schedule			<b>1 hour @ 120°C plus 3 hours @ 150°C</b>

**OPERATING CONDITIONS:**

**EPN-0850 A/B is used for potting and encapsulating. Use standard equipment and standard procedure for making castings.**

**Bring the part A to 70-75°C and keep the part B at room temperature. Mix A/B for 1-2 minutes, cast in a mould and cure in an oven at 130-150°C.**

**Keep in a cool dry place, away from flame and oxidising chemicals. The storage life is at least 1 year.**

**ADDITIONAL INFORMATION**

**SUGGESTED CURE SCHEDULE**

**A suggested cure schedule for EPN-0850 could be 3 hours @ 80-90°C for minimum shrinkage, plus a post cure of 12-16 hours @ 100°C. Where a temperature cure is desired, a cure of 16 hours @ 100°C or 8 hours @ 120-125°C is recommended.**

**As the shape of the unit becomes more complex and the size becomes large, such as with distributor transformers and large stators, it is necessary to lower the cure temperature and cure initially for 12-16 hours @ 80-90° followed by a post cure of 2-3 hours @ 150°C.**

**PHYSICAL PROPERTIES OF CURED EPN-0850**

PROPERTIES	APPLICABLE ASTM STD	VALUE
Hardness, shore D	<b>D-2240</b>	<b>80-90</b>
Dielectric constant 1000HZ, 30 C	<b>D-150</b>	<b>4.1 - 4.5</b>
Dielectric strength (V/mil. 1/8")	<b>D-149</b>	<b>400</b>
Volume resistivity (ohm-cm)	<b>D-257</b>	<b>1.5-2.5 x 10<sup>14</sup></b>
Coefficient of thermal expansion (IN)(IN)(DEG.C)	<b>D-696</b>	<b>35 - 45 x 10<sup>-6</sup></b>
Heat distortion (deg F , 264 PSI)	<b>D-648</b>	<b>230-240 F</b>
COMPRESSIVE STRENGTH (PSI )MPAS)	<b>D-695</b>	<b>23000-26100</b>
TENSILE STRENGTH ( PSI)	<b>D-638</b>	<b>11600-13050</b>
Moisture absorption, (10 days immersion at 20 C)	<b>D-570</b>	<b>0.29 - 0.33 (in percent)</b>
FLEXURAL STRENGTH (PSI)	<b>D-790</b>	<b>18125-19575</b>
Impact strength izod	<b>D-256</b>	<b>4-5 Ft-Lb</b>
Flammability per UL94		<b>225 sec</b>
High Voltage Low Current Arc resistance	<b>D-495-94</b>	<b>194 sec</b>
Inclined Plane Tracking	<b>D-2303-95</b>	<b>&gt;600 minutes</b>

**PRECAUTION**

**Use good personal hygiene. Store material in a cool, dry place. Shelf life is one year in original sealed container. Consult the Material Safety Data Sheet for further cautionary information.**



## EPN-0853 A/B -M CASTING EPOXY

Version 2007

**PRODUCT TYPE:**

**Formulated epoxy Adhesive.**

**SUGGESTED USES:**

**EPN-0853 A/B-M is a grey coloured, highly filled, low and high temperature heat curing Epoxy resin system.**

**EPN-0853 A/B-M exhibits when cured excellent mechanical strength, excellent resistance to elevated temperature, good resistance to water and chemicals, and excellent electrical properties at both room and elevated temperatures.**

**PHYSICAL PROPERTIES & GENERAL INFORMATION:**

	PART A	PART B	Mixed
Colour	<b>Grey</b>	<b>Clear-Amber</b>	<b>Grey</b>
Viscosity (CPS) @ 30C	<b>40000-50000</b>	<b>50 - 250</b>	
%Solids by wgt.	<b>100 %</b>	<b>100 %</b>	<b>100 %</b>
Cleaner	<b>S-0001</b>	<b>S-0001</b>	<b>S-0001</b>
Density (kg/lt)	<b>1.8136</b>	<b>1.1823</b>	
Mix ratio by weight	<b>100</b>	<b>30</b>	
Pot life (125 C) 454 gm)@275F			<b>40-70 Min</b>
Cure schedule			<b>1 hr @ 100 C</b> <b>1 hr @ 120 C</b> <b>plus 4 hrs @ 150 C</b>

**OPERATING CONDITIONS:**

**EPN-0853 A/B-M is used for potting and encapsulating. Use standard equipment and standard procedure for making castings.**

**Bring the part A to 160-170 deg F and keep the part B at room temperature. Mix A/B for 1-2 minutes, cast in a mould and cure in an oven at 270-300 deg F.**

**Keep in a cool dry place, away from flame and oxidizing chemicals. The storage life is at least 1 year.**

## ADDITIONAL INFORMATION

### SUGGESTED CURE SCHEDULE

A suggested cure schedule for EPN-0853-M could be 3 hours @ 80-90 C for minimum shrinkage, plus a post cure of 12-16 hours @ 100 C. Where a temperature cure is desired, a cure of 16 hours @ 100 C or 8 hours @ 120-125 C is recommended.

As the shape of the unit becomes more complex and the size becomes large, such as with distributor transformers and large stators, it is necessary to lower the cure temperature and cure initially for 12-16 hours @ 80-90 C followed by a post cure of 2-3 hours @ 150 C.

### TYPICAL PHYSICAL PROPERTIES OF CURED EPN-0853 A,B-M

PROPERTIES	APPLICABLE ASTM STD	VALUE
Hardness, shore D	<b>D-2240</b>	<b>80-90</b>
Dielectric constant 1000HZ, 30 C	<b>D-150</b>	<b>4.1 - 4.5</b>
Dielectric strength (V/mil. 1/8")	<b>D-149</b>	<b>400</b>
Volume resistivity (ohm-cm)	<b>D-257</b>	<b>1.5-2.5 x 10<sup>14</sup></b>
Coefficient of thermal expansion (IN/(IN)(DEG.C) X 10 <sup>6</sup>	<b>D-696</b>	<b>35-45</b>
Heat distortion (deg F , 264 PSI)	<b>D-648</b>	<b>230-240 F</b>
COMPRESSIVE STRENGTH (PSI )MPAS)	<b>D-695</b>	<b>35000-36000</b>
TENSILE STRENGTH ( PSI)	<b>D-638</b>	<b>10500-14000</b>
Moisture absorption, (10 days immersion at 20 C)	<b>D-570</b>	<b>0.29 - 0.33 (in percent)</b>
FLEXURAL STRENGTH (PSI)	<b>D-790</b>	<b>18000-22000</b>
Impact strength izod	<b>D-256</b>	<b>4 -5 Ft-Lb</b>
Flammability per UL94		<b>225 sec</b>
High Voltage Low Current Arc resistance	<b>D-495-94</b>	<b>194 sec</b>
Inclined Plane Tracking	<b>D-2303-95</b>	<b>&gt;650minutes</b>

### PRECAUTION

**Use good personal hygiene. Store material in a cool, dry place. Shelf life is one year in original sealed container. Consult the Material Safety Data Sheet for further cautionary information.**



## E-1097 A/B CASTING EPOXY

Version 2007

### PRODUCT TYPE:

**Formulated epoxy Adhesive.**

### SUGGESTED USES:

**E-1097 A/B is a red coloured casting epoxy resin, which is a solid at room temperature. It flows freely at 130 deg C.**

**E-1097 A/B exhibits when cured excellent mechanical strength, excellent resistance to elevated temperature, good resistance to water and chemicals, and good electrical properties at both room and elevated temperatures.**

### PHYSICAL PROPERTIES & GENERAL INFORMATION:

	<b>Part A</b>	<b>Part B</b>	<b>Mixed</b>
Colour	<b>Red</b>	<b>Colourless</b>	<b>Red</b>
Viscosity (cps @ 177°C)	<b>4000-6000</b>	<b>Solid</b>	<b>Solid</b>
%Solids by weight	<b>100 %</b>	<b>100 %</b>	<b>100 %</b>
Cleaner	<b>S-0001</b>	<b>S-0001</b>	<b>S-0001</b>
Density (kg/l)	<b>1.814</b>	<b>1.527</b>	<b>1.839</b>
Mix ratio by weight	<b>100</b>	<b>10</b>	
Mix ratio by volume	<b>100</b>	<b>12</b>	
Pot life (125°C, 454 g)			<b>2-3 hours</b>
Cure schedule			<b>4 hours @ 150° C</b>

### OPERATING CONDITIONS:

**E-1097 A/B is used for potting and encapsulating. Use standard equipment and standard procedure for making castings.**

**Keep in cool dry place, away from flame and oxidizing chemicals. The storage life is at least one year.**

**ADDITIONAL INFORMATION:**

**PHYSICAL PROPERTIES OF CURED E-1097**

<b>Properties</b>	<b>Applicable ASTM</b>	<b>VALUE</b>
<b>Tensile strength (PSI)</b>	<b>D-638</b>	<b>10,000 - 12,000</b>
<b>Flexural Strength(PSI) 1000HZ, 30 C</b>	<b>D-790</b>	<b>17,000 – 20,000</b>
<b>Compressive strength (PSI)</b>	<b>D-695</b>	<b>25,000 - 27,000</b>
<b>Hardness, shore D</b>	<b>D-2240</b>	<b>85 – 90</b>
<b>Dielectric constant 100HZ, 30 C</b>	<b>D-150</b>	<b>4.1 - 4.5</b>
<b>Dielectric constant 1000HZ, 30 C</b>	<b>D-150</b>	<b>4.1 - 4.5 4.1 - 4.5</b>
<b>Dielectric strength (V/mil. 1/8")</b>	<b>D-149</b>	<b>400</b>
<b>Volume resistivity (ohm-cm)</b>	<b>D-257</b>	<b>5.0 - 5.5 x 10<sup>14</sup></b>
<b>Coefficient of thermal expansion (30-90 c)</b>	<b>D-696</b>	<b>25 - 35 x 10<sup>-6</sup></b>
<b>Heat distortion (deg F, 264 PSI)</b>	<b>D-648</b>	<b>240 – 260 F</b>
<b>Moisture absorption, (24 hrs immersion) (in percent</b>	<b>D-570</b>	<b>0.10 - 0.20</b>

**PRECAUTION:**

**Use good personal hygiene. Store material in a cool, dry place. Shelf life is one year in original sealed container. Consult the Material Safety Data Sheet for further cautionary information.**



## E-1199 A/B-M CASTING EPOXY

Version 2007

PRODUCT TYPE:

**Formulated epoxy Adhesive.**

SUGGESTED USES:

E-1199 A/B-M is a **grey coloured, rigid, filled, low temperature heat curing Epoxy resin system. E-1199 A/B-M exhibits when cured excellent mechanical strength, excellent resistance to elevated temperature, good resistance to water and chemicals, and excellent electrical properties at both room and elevated temperatures.**

PHYSICAL PROPERTIES & GENERAL INFORMATION:

	PART A	PART B	Mixed
Colour	<b>Grey</b>	<b>Clear-Amber</b>	<b>Grey</b>
Viscosity (CPS) @ 30°C	<b>15000-25000</b>	<b>50 - 250</b>	
%Solids by weight.	<b>100 %</b>	<b>100 %</b>	<b>100 %</b>
Cleaner	<b>S-0001</b>	<b>S-0001</b>	<b>S-0001</b>
Density (kg/l)	<b>1.8</b>	<b>1.15</b>	<b>1.7</b>
Mix ratio by weight	<b>100</b>	<b>30</b>	
Pot life (135°C, 390 g)			<b>20-40 minutes</b>
Cure schedule			<b>1 hour @ 120°C plus 3 hours @ 150°C</b>

OPERATING CONDITIONS:

E-1199 A/B-M is used for potting and encapsulating. Use standard equipment and standard procedure for making castings.

Bring the part A to 70-75°C and keep the part B at room temperature. Mix A/B for 1-2 minutes, cast in a mould and cure in an oven at 130-150°C.

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Keep in a cool dry place, away from flame and oxidising chemicals. The storage life is at least 1 year.

## ADDITIONAL INFORMATION

### SUGGESTED CURE SCHEDULE

**A suggested cure schedule for E-1199M could be 3 hours @ 80-90°C for minimum shrinkage, plus a post cure of 12-16 hours @ 100°C. Where a temperature cure is desired, a cure of 16 hours @ 100°C or 8 hours @ 120-125°C is recommended.**

**As the shape of the unit becomes more complex and the size becomes large, such as with distributor transformers and large stators, it is necessary to lower the cure temperature and cure initially for 12-16 hours @ 80-90° followed by a post cure of 2-3 hours @ 150°C.**

### TYPICAL PHYSICAL PROPERTIES OF CURED E-1199-M

PROPERTIES	APPLICABLE ASTM STD	VALUE
Hardness, shore D	<b>D-2240</b>	<b>80-90</b>
Dielectric constant 1000HZ, 30 C	<b>D-150</b>	<b>4.1 - 4.5</b>
Dielectric strength (V/mil. 1/8")	<b>D-149</b>	<b>400</b>
Volume resistivity (ohm-cm)	<b>D-257</b>	<b>1.5-2.5 x 10<sup>14</sup></b>
Coefficient of thermal expansion (IN/ IN(DEG.C)X10 <sup>6</sup> )		<b>35-45</b>
Heat distortion (deg F , 264 PSI)	<b>D-648</b>	<b>230-240 F</b>
COMPRESSIVE STRENGTH (PSI)	<b>D-695</b>	<b>20000-25000</b>
TENSILE STRENGTH ( PSI)	<b>D-638</b>	<b>10900-12300</b>
Moisture absorption, (24 hrs immersion)	<b>D-570</b>	<b>0.29 - 0.33 (in percent)</b>
FLEXURAL STRENGTH (PSI)	<b>D-790</b>	<b>15500-18500</b>
Impact strength izod	<b>D-256</b>	<b>4-5 Ft-Lb</b>
Flammability per UL94		<b>225 sec</b>
High Voltage Low Current Arc resistance	<b>D-495-94</b>	<b>194 sec</b>
Inclined Plane Tracking	<b>D-2303-95</b>	<b>645 minutes</b>

### PRECAUTION

**Use good personal hygiene. Store material in a cool, dry place. Shelf life is one year in original sealed container. Consult the Material Safety Data Sheet for further cautionary information.**



## E-1928 A/B CASTING EPOXY

Version 2007

PRODUCT TYPE:

**Formulated epoxy Adhesive.**

SUGGESTED USES:

E-1928 A/B is a room temperature cure black coloured semi rigid epoxy system particularly suited for potting and encapsulation applications. It is designed for encapsulating electrical or electronic components which might be exposed to temperature range of -55 Deg C to 100 Deg C.

E-1928 A/B exhibits when cured excellent mechanical strength, excellent resistance to elevated temperature, good resistance to water and chemicals, and excellent electrical properties at both room and elevated temperatures. .

PHYSICAL PROPERTIES & GENERAL INFORMATION:

	PART A	PART B	Mixed
Colour	<b>black</b>	<b>Clear-straw</b>	<b>black</b>
Viscosity (CPS) @ 25C	<b>1800-2200</b>	<b>500-700</b>	
%Solids by wgt.	<b>100 %</b>	<b>100 %</b>	<b>100 %</b>
Cleaner	<b>S-0001</b>	<b>S-0001</b>	<b>S-0001</b>
Density (kg/lt)	<b>1.113</b>	<b>0.953</b>	
Mix ratio by weight	<b>100</b>	<b>43</b>	
Mix by volume	<b>2</b>	<b>1</b>	
Pot life (125 C) 454 gm)			<b>80-100 Min</b>
Cure schedule (1)(suggested)			<b>1- 1<sup>1/2</sup> hr @ 100 C</b> <b>1 hr @ 120 C</b> <b>4 hrs @ 200 deg C</b>

#### OPERATING CONDITIONS:

E-1928 A/B is used for potting and encapsulating. Use standard equipment and standard procedure for making casting

Keep in a cool dry place, away from flame and oxidising chemicals. The storage life is at least 1 year.

#### ADDITIONAL INFORMATION

##### SUGGESTED CURE SCHEDULE( 2)

A suggested cure schedule for E-1928 could be 3 hours @ 80-90 C for minimum shrinkage, plus a post cure of 12-16 hours @ 100 C. Where a temperature cure is desired, a cure of 16 hours @ 100 C.

##### PHYSICAL PROPERTIES OF CURED E-1928

PROPERTIES	APPLICABLE ASTM STD	VALUE
Hardness, shore D	<b>D-2240</b>	<b>80-85</b>
Dielectric constant 1000HZ, 30 C	<b>D-150</b>	<b>4.1 - 4.5</b>
Dielectric strength (V/mil. 1/8")	<b>D-149</b>	<b>400</b>
Volume resistivity (ohm-cm)	<b>D-257</b>	<b>1.5-2.5 x 10<sup>14</sup></b>
Coefficient of thermal expansion (IN/ IN(DEG.C)X10 <sup>6</sup>	<b>D-696</b>	<b>35-45</b>
Heat distortion (deg F , 264 PSI)	<b>D-648</b>	
COMPRESSIVE STRENGTH (PSI)	<b>D-695</b>	<b>13000-15000</b>
TENSILE STRENGTH ( PSI)	<b>D-638</b>	<b>8000-9000</b>
Moisture absorption, (24 hrs immersion)	<b>D-570</b>	<b>0.29 - 0.33 (in percent)</b>
FLEXURAL STRENGTH (PSI)	<b>D-790</b>	<b>8000-10000</b>
Impact strength izod	<b>D-256</b>	<b>4-5 Ft-Lb</b>
Flammability per ASTM 757		
High Voltage Low Current Arc resistance	<b>D-495-94</b>	
Inclined Plane Tracking	<b>D-2303-95</b>	<b>minutes</b>

#### PRECAUTION

Use good personal hygiene. Store material in a cool, dry place. Shelf life is one year in original sealed container. Consult the Material Safety Data Sheet for further cautionary information.



## E3557 A/B CASTING EPOXY

Version 2007

PRODUCT TYPE:

**Formulated epoxy Adhesive.**

SUGGESTED USES:

**E3557 A/B is a grey coloured, filled, low temperature heat curing Epoxy resin system.**

**E3557 A/B exhibits when cured excellent mechanical strength, excellent resistance to elevated temperature, good resistance to water and chemicals, and excellent electrical properties at both room and elevated temperatures.**

PHYSICAL PROPERTIES & GENERAL INFORMATION:

	PART A	PART B	Mixed
Colour	<b>Grey</b>	<b>Clear-Amber</b>	<b>Grey</b>
Viscosity (CPS) @ 55C:	<b>80000-100000</b>	<b>50 - 250</b>	<b>3000-4000 cps</b>
%Solids by wgt.	<b>100 %</b>	<b>100 %</b>	<b>100 %</b>
Cleaner	<b>S-0001</b>	<b>S-0001</b>	<b>S-0001</b>
Density (kg/lt)	<b>1.90</b>	<b>1.21</b>	<b>1.72</b>
Mix ratio by weight	<b>100</b>	<b>22</b>	
Mix ratio by volume	<b>100</b>	<b>42</b>	
Pot life (125 C) 454 gm)			<b>30-60 Min</b>
Cure schedule			<b>1 hr @ 120 C plus 3 hrs @ 150 C</b>

OPERATING CONDITIONS:

**E3557 A/B is used for potting and encapsulating. Use standard equipment and standard procedure for making castings.**

**Bring the part A to 160-170 deg F and keep the part B at room**

**Temperature. Mix A/B for 1-2 minutes, cast in a mould and cure in an oven at 270-300 deg F.**

**Keep in a cool dry place, away from flame and oxidising chemicals. The storage life is at least 1 year.**

## ADDITIONAL INFORMATION

### SUGGESTED CURE SCHEDULE

A suggested cure schedule for E3557 could be 3 hours

@ 80-90 C for minimum shrinkage, plus a post cure of 12-16 hours @ 100 C. Where a temperature cure is desired, a cure of 16 hours @ 100 C or 8 hours @ 120-125 C is recommended.

As the shape of the unit becomes more complex and the size becomes large, such as with distributor transformers and large stators, it is necessary to lower the cure temperature and cure initially for 12-16 hours @ 80-90 C followed by a post cure of 2-3 hours @ 150 C.

### PHYSICAL PROPERTIES OF CURED E3557

PROPERTIES	APPLICABLE ASTM STD	VALUE
Hardness, shore D	<b>D-2240</b>	<b>80-90</b>
Dielectric constant 1000HZ, 30 C	<b>D-150</b>	<b>4.1 - 4.5</b>
Dielectric strength (V/mil. 1/8")	<b>D-149</b>	<b>400</b>
Volume resistivity (ohm-cm)	<b>D-257</b>	<b>1.5-2.5 x 10<sup>14</sup></b>
Coefficient of thermal expansion (IN)(IN)(DEG.C)	<b>D-696</b>	<b>35 - 45 x 10<sup>-6</sup></b>
Heat distortion (deg F , 264 PSI)	<b>D-648</b>	<b>230-240 F</b>
COMPRESSIVE STRENGTH (PSI )MPAS)	<b>D-695</b>	<b>23000-26100</b>
TENSILE STRENGTH ( PSI)	<b>D-638</b>	<b>11600-13050</b>
Moisture absorption, (10 days immersion at 20 C)	<b>D-570</b>	<b>0.29 - 0.33 (in percent)</b>
FLEXURAL STRENGTH (PSI)	<b>D-790</b>	<b>18125-19575</b>
Impact strength izod	<b>D-256</b>	<b>4-5 Ft-Lb</b>
Flammability per UL94		<b>225 sec</b>
High Voltage Low Current Arc resistance	<b>D-495-94</b>	<b>194 sec</b>
Inclined Plane Tracking	<b>D-2303-95</b>	<b>&gt;600 minutes</b>

### PRECAUTION

Use good personal hygiene. Store material in a cool, dry place. Shelf life is one year in original sealed container. Consult the Material Safety Data Sheet for further cautionary information.



## E-3795A/B HIGH HEAT EPOXY INFUSION SYSTEM

Version 2008

PRODUCT TYPE:  
**Formulated Epoxy Infusion.**

SUGGESTED USES:

**E-3795A/B is a two component, low viscosity, laminating/infusion system with excellent heat resistance and mechanical properties. It slow gel time, good fibre wetting property convenient for conventional hand lay up laminating or infusion process (vacuum assisted).**

### PHYSICAL PROPERTIES & GENERAL INFORMATION:

	PART A	PART B	Mixed
Colour	Dark amber	Clear	Dark amber
Type	Epoxy resin	Amine	
Viscosity (cps)	950-1050	50-100	350-450
% Solids by weight	100	100	100
% Solids by volume	100	100	100
Cleaner	S-0001	S-0001	S-0001
Density (kg/l)	1.205	0.945	1.100
Mixing ratio by weight	100	54	
Gel time(150gm at 25C)			6-8hrs
Cure schedule			See Note **
Glass trans. temp.(Tg)			~210-216C
Shelf life	12 months	12 months	

Note \*\*: After gel at room temperature 16-24 hrs, the following post cure schedule is recommended:

2hrs @ 100C  
2hrs @ 150C  
2hrs @ 200C  
2hrs @ 250C

OPERATING CONDITIONS:

**Mix 100 parts of E-3795-A with 54 parts of E-0560-B by weights and apply.  
Avoid high temperature environment to ensure the long working life for infusion process**

PRECAUTION

**Use good personal hygiene. Store materials (especially part A) in a cool, dry place. Shelf life is one year in original sealed container. Consult the Material Safety Data Sheet for further cautionary information.**

IMPORTANT NOTICE

**All statements, recommendations and technical information contained in this document are based on tests and information which TRI-TEX Inc. believes to be accurate as of this date; the buyer however should test this product before use. TRI-TEX Inc. assumes no obligation or liability for results obtained from the use of this product. The product and information herein are furnished at the buyers request and risk. TRI-TEX Inc. will not be liable for any direct, indirect, consequential, economic or any other damage whatsoever except to replace the product and or refund the purchase price to the purchaser.**



## E3797 A/B CASTING EPOXY

Version 2008

PRODUCT TYPE:

**Formulated epoxy casting.**

SUGGESTED USES:

**E3797 is a grey coloured, highly filled, low and high temperature heat curing epoxy resin system.**

**E3797 when fully cured exhibits excellent mechanical strength, excellent resistance to elevated temperature, good resistance to water and chemicals, and excellent electrical properties at both room and elevated temperatures.**

PHYSICAL PROPERTIES & GENERAL INFORMATION:

	PART A	PART B	Mixed
Colour	<b>Light grey</b>	<b>Light beige</b>	<b>Light grey</b>
Viscosity (CPS) @ 50C	<b>10000-15000</b>	<b>12000-18000</b>	<b>12000-18000</b>
%Solids by wgt.	<b>100 %</b>	<b>100 %</b>	<b>100 %</b>
Cleaner	<b>S-0001</b>	<b>S-0001</b>	<b>S-0001</b>
Density (kg/ltr)	<b>~1.8</b>	<b>~1.8</b>	<b>~1.8</b>
Mix ratio by weight	<b>100</b>	<b>100</b>	
Gel time (125 C) 454 gm)@275F			<b>16-20 Min</b>
Cure schedule			<b>1 hr @ 100 C 1 hr @ 120 C plus 4 hrs @ 150 C</b>

OPERATING CONDITIONS:

**E3797 is used for potting and encapsulating. Use standard equipment and standard procedure for making castings.**

**Bring the part A and B to 160-170 deg F. Mix A/B for 1-2 minutes, cast in a mould and cure in an oven at 270-300 deg F.**

**Keep in a cool dry place, away from flame and oxidizing chemicals. The storage life is at least 1 year.**

ADDITIONAL INFORMATION

SUGGESTED CURE SCHEDULE

A suggested cure schedule for E3797 could be 3 hours @ 80-90 C for minimum shrinkage, plus a post cure of 12-16 hours @ 100 C. Where a temperature cure is desired, a cure of 16 hours @ 100 C or 8 hours @ 120-125 C is recommended.

As the shape of the unit becomes more complex and the size becomes large, such as with distributor transformers and large stators, it is necessary to lower the cure temperature and cure initially for 12-16 hours @ 80-90 C followed by a post cure of 2-3 hours @ 150 C.

TYPICAL PHYSICAL PROPERTIES OF CURED RESIN:

PROPERTIES	APPLICABLE ASTM STD	VALUE
Hardness, shore D	<b>D-2240</b>	<b>80-90</b>
Dielectric constant 1000HZ, 30 C	<b>D-150</b>	<b>~4.0</b>
Dielectric strength (V/mil. 1/8")	<b>D-149</b>	<b>~400</b>
Volume resistivity (ohm-cm)	<b>D-257</b>	<b>~1.5-2.5 x 10<sup>14</sup></b>
Coefficient of thermal expansion (IN/(IN)(DEG.C) X 10 <sup>6</sup>	<b>D-696</b>	<b>~35-45</b>
Heat distortion (deg F , 264 PSI)	<b>D-648</b>	<b>~230-240 F</b>
COMPRESSIVE STRENGTH (PSI )MPAS)	<b>D-695</b>	<b>N/Avail.</b>
TENSILE STRENGTH ( PSI)	<b>D-638</b>	<b>~10500-14000</b>
Moisture absorption, (10 days immersion at 20 C)	<b>D-570</b>	<b>0.29 - 0.33 (in percent)</b>
FLEXURAL STRENGTH (PSI)	<b>D-790</b>	<b>~18000-22000</b>
Impact strength izod	<b>D-256</b>	<b>N/Avail.</b>
Flammability per UL94		<b>225 sec</b>
High Voltage Low Current Arc resistance	<b>D-495-94</b>	<b>N/Avail.</b>
Inclined Plane Tracking	<b>D-2303-95</b>	<b>N/Avail.</b>

PRECAUTION

Use good personal hygiene. Store material in a cool, dry place. Shelf life is one year in original sealed container. Consult the Material Safety Data Sheet for further cautionary information.



## E3886 A/B CASTING EPOXY

Version 2008

**PRODUCT TYPE:**

**Formulated epoxy casting.**

**SUGGESTED USES:**

**E3886 is a grey coloured, heat curing cycloaliphatic epoxy resin system that contains mechanically reinforcing fillers. It is designed to be used at low and high temperature. It offers high thermal shock combined with high glass transition temperature.**

**E3886 when fully cured exhibits excellent mechanical strength, excellent resistance to elevated temperature, good resistance to water and chemicals, and excellent electrical properties at both room and elevated temperatures.**

**Applications:**

**Electrical Insulating Components.**

**Bushings.**

**Line post and pin insulators in the medium voltage range.**

**All components for humid indoor and high voltage environments.**

**PHYSICAL PROPERTIES & GENERAL INFORMATION:**

	PART A	PART B	Mixed
Colour	<b>Light grey</b>	<b>Light beige</b>	<b>Light grey</b>
Viscosity (CPS) @ 50C	<b>15000-20000</b>	<b>15000-20000</b>	<b>15000-20000</b>
%Solids by wt.	<b>100 %</b>	<b>100 %</b>	<b>100 %</b>
Cleaner	<b>S-0001</b>	<b>S-0001</b>	<b>S-0001</b>
Density (kg/lt)	<b>~1.7-1.8</b>	<b>~1.8-1.9</b>	<b>~1.8</b>
Mix ratio by wt.	<b>100</b>	<b>100</b>	
Gel time (125 C) 454 gm)@275F			<b>16-20 Min</b>
Cure schedule			<b>1 hr @ 100 C 1 hr @ 120 C Plus 4hrs@150C</b>

## OPERATING CONDITIONS:

**E3886 is used for Encapsulating System (Potting and/or Casting). Use standard equipment and standard procedure for making castings.**

**Bring the part A and B to 160-170 deg F. Mix A/B for 1-2 minutes, cast in a mould and cure in an oven at 270-300 deg F.**

**Keep in a cool dry place, away from flame and oxidizing chemicals. The storage life is at least 1 year.**

## ADDITIONAL INFORMATION

### SUGGESTED CURE SCHEDULE

**A suggested cure schedule for E3886 could be 3 hours @ 80-90 C for minimum shrinkage, plus a post cure of 12-16 hours @ 100 C. Where a temperature cure is desired, a cure of 16 hours @ 100 C or 8 hours @ 120-125 C is recommended.**

**As the shape of the unit becomes more complex and the size becomes large, such as with distributor transformers and large stators, it is necessary to lower the cure temperature and cure initially for 12-16 hours @ 80-90 C followed by a post cure of 2-3 hours @ 150 C.**

### TYPICAL PHYSICAL PROPERTIES OF CURED RESIN: (Approximation)

PROPERTIES	APPLICABLE ASTM STD	VALUE
Hardness, shore D	<b>D-2240</b>	<b>80-90</b>
Dielectric constant 1000HZ, 30 C	<b>D-150</b>	<b>4.1-4.5</b>
Dielectric strength (V/mil. 1/8")	<b>D-149</b>	<b>400</b>
Volume resistivity (ohm-cm)	<b>D-257</b>	<b>~1.5-2.5 x 10<sup>14</sup></b>
Coefficient of thermal expansion (IN/(IN)(DEG.C) X 10 <sup>6</sup>	<b>D-696</b>	<b>~35-45</b>
Heat distortion (deg F , 264 PSI)	<b>D-648</b>	<b>~230-240 F</b>
COMPRESSIVE STRENGTH (PSI )MPAS)	<b>D-695</b>	<b>35000-36000</b>
TENSILE STRENGTH ( PSI)	<b>D-638</b>	<b>~10500-14000</b>
Moisture absorption, (10 days immersion at 20 C)	<b>D-570</b>	<b>0.29 - 0.33 (in percent)</b>
FLEXURAL STRENGTH (PSI)	<b>D-790</b>	<b>~18000-22000</b>
Impact strength izod	<b>D-256</b>	<b>4-5 Ft-Lb</b>
Flammability per UL94		<b>225 sec</b>
High Voltage Low Current Arc resistance	<b>D-495-94</b>	<b>194 sec</b>
Inclined Plane Tracking	<b>D-2303-95</b>	<b>&gt;650 minutes</b>

## PRECAUTION

**Use good personal hygiene. Store material in a cool, dry place. Shelf life is one year in original sealed container. Consult the Material Safety Data Sheet for further cautionary information.**



## E3916A/B ELECTRICAL CASTING EPOXY

Version 2008

**PRODUCT TYPE:**

**Formulated epoxy casting for electrical insulation.**

**SUGGESTED USES:**

**E3916 is a two component, heat curing epoxy system for electrical casting application containing mildly abrasive mechanically reinforcing fillers. It is designed to be used at a temperature up to 200C. It offers excellent thermal shock resistance and thermal endurance.**

**E3916 when fully cured exhibits excellent mechanical strength, excellent resistance to elevated temperature, good resistance to water and chemicals, and excellent electrical properties at both room and elevated temperatures.**

**Applications:**

**Electrical Insulating Components.**

**Bushings.**

**Line post and pin insulators in the medium voltage range.**

**All components for humid indoor medium and high voltage environments.**

**PHYSICAL PROPERTIES & GENERAL INFORMATION:**

	PART A	PART B	Mixed
Colour	<b>Black</b>	<b>Beige</b>	<b>Dark Charcoal</b>
Viscosity (CPS) @ 40C	<b>30000-40000</b>	<b>30000-40000</b>	<b>30000-40000</b>
%Solids by wt.	<b>100 %</b>	<b>100 %</b>	<b>100 %</b>
Cleaner	<b>S-0001</b>	<b>S-0001</b>	<b>S-0001</b>
Density (kg/lt)	<b>~1.7-1.8</b>	<b>~1.8-1.9</b>	<b>~1.8</b>
Mix ratio by wt.	<b>100</b>	<b>100</b>	
Gel time (454 gm)@120C			<b>30-35 Min</b>
Cure schedule			<b>1 hr @ 100 C 1 hr @ 120 C Plus 4hrs@150C</b>

## OPERATING CONDITIONS:

**E3916 is used for Encapsulating System (Potting and/or Casting). Use standard equipment and standard procedure for making castings.**

**Bring the part A and B to 60-70C (140-160 F). Mix A/B for 1-2 minutes, cast in a mould and cure in an oven at 270-300 deg F.**

**Keep in a cool dry place, away from flame and oxidizing chemicals. The storage life is at least 1 year. Both resin and hardener should not be stored for long period at temperatures in excess of 30C or in excess of 100C for more than 2 hours (viscosity could increase and reduced cured properties).**

## ADDITIONAL INFORMATION

### SUGGESTED CURE SCHEDULE

**A suggested cure schedule for E3916 could be 3 hours @ 80-90 C for minimum shrinkage, plus a post cure of 12-16 hours @ 100 C. Where a shorter cure is desired, a period of 16 hours @ 100 C or 8 hours @ 120-125 C is recommended.**

**As the shape of the unit becomes more complex and the size becomes large, such as with distributor transformers and large stators, it is necessary to lower the cure temperature and cure initially for 12-16 hours @ 80-90 C followed by a post cure of 2-3 hours @ 150 C.**

### TYPICAL PHYSICAL PROPERTIES OF CURED RESIN: (Approximation)

PROPERTIES	APPLICABLE ASTM STD	VALUE
Hardness, shore D	<b>D-2240</b>	<b>90-95</b>
Dielectric constant 60 HZ, 30 C	<b>D-150</b>	<b>4.1-4.5</b>
Dielectric strength (V/mil. 1/8")	<b>D-149</b>	<b>N/Avail.</b>
Volume resistivity (ohm-cm) (100C)	<b>D-257</b>	<b>~1.5-2.5 x 10<sup>14</sup></b>
Coefficient of thermal expansion (in/in .C X 10 <sup>6</sup> )	<b>D-696</b>	<b>N/Avail.</b>
Glass transition temperature (deg C.)	<b>By DSC</b>	<b>~110-120 C</b>
COMPRESSIVE STRENGTH (PSI) (MPAS)	<b>D-695</b>	<b>25000-30000</b>
TENSILE STRENGTH (PSI)	<b>D-638</b>	<b>~11000-12000</b>
Moisture absorption, (%, 24 hrs immersion @ 25 C)	<b>D-570</b>	<b>0.20 – 0.25</b>
FLEXURAL STRENGTH (PSI)	<b>D-790</b>	<b>~18000-20000</b>
Impact strength izod	<b>D-256</b>	<b>N/Avail.</b>
Flammability per UL94		<b>N/Avail.</b>
High Voltage Low Current Arc resistance	<b>D-495-94</b>	<b>194 sec</b>
Inclined Plane Tracking	<b>D-2303-95</b>	<b>N/Avail.</b>

## PRECAUTION

**Use good personal hygiene. Store material in a cool, dry place. Shelf life is one year in original sealed container. Consult the Material Safety Data Sheet for further cautionary information.**



**ELECTRICAL COMPOUND**

**1205-T**

**ROOM TEMPERATURE CURE CASTING SYSTEM**

**Description:**

The 1205-T is a two component casting system that cures at room temperature. It is a low viscosity system with a long pot life, a low exothermic reaction and low linear shrinkage. It is composed of inorganic fillers and has been specially formulated as a rigid potting compound.

**Uses:**

May be used for high voltage applications to cast transformers, resistors and other materials, requiring electrical insulation.

**Typical uncured properties:**

Components	Mixing Ratio		Specific Gravity	Viscosity ASTMD-2393 Brookfield @ 25 <sup>o</sup> C mPa.s (cps)	Packaging			Color
	By weight # Parts	By volume # Parts			Kg			
Resin	100	100	1.64	24 000 - 28 000	4.40	21.93	328.00	Black
Hardener	14	23	0.99	500 - 800	0.60	3.07	46.00	Amber
Mix			1.52	5 000 - 6 000	5.00	25.00	374.00	Black

**Gel time:**

Minutes	Temp. °C	Mass (gr.)
60 - 70	22	150

**Coverage:**

One (1) kg covers approximately 650 cm<sup>3</sup> to 700 cm<sup>3</sup> (39 in<sup>3</sup> to 43 in<sup>3</sup>).

**Typical cured properties:**

Minimum cure schedule for 7 days @ 22°C

	ASTM	
Tensile strength, psi:	D-638	8 000
Heat deflection temperature @ 264 psi, °C:	D-648	60
Flexural strength, psi:	D-790	14 500
Compression strength, psi:	D-695	17 800
Impact resistance, IZOD:	D-256	0.22
Linear shrinkage, %:	D-2566	0.05
Thermal expansion coefficient, in/in/°F:	D-696	6.2 x 10 <sup>-5</sup>
Hardness, Shore D:	D-2240	85 - 90
Elongation, %:	D-638	5.0
Water absorption, %:	--	0.2

**Cured electrical properties:**

	ASTM	25°C	85°C
Dielectric constant (K), 1 KHz:	D-150	4.2	5.2
Dissipation factor (D), 1 KHz:	D-150	0.017	0.061
Volume resistivity	D-257	3.0 x 10 <sup>16</sup>	5.0 x 10 <sup>13</sup>
Surface resistivity in ohms	D-257	1.0 x 10 <sup>15</sup>	1.0 x 10 <sup>13</sup>

**Mixing:**

1. Mix 1205-T resin only with 1205-T hardener.
2. Do not use damaged or leaking containers.
3. Premix resin and hardener separately. Then place the hardener into the resin container according to the required mixing ratio.
4. Blend the hardener into the resin thoroughly using a paddle attached to a low speed heavy duty electric drill at 300-600 rpm. Continue to mix for a minimum of 3 minutes or until the mix becomes homogeneous.
5. Never dilute with solvents.

**Cleaning of tools:**

Tools and equipment should be cleaned immediately after use with Tri-Tex's #17 solvent or with Tri-Tex's "Clean tool" #4 for a safer use.

**Storage:**

Keep containers closed until just before use at a temperature above 15°C.

**Caution:**

Keep resin and hardener away from eyes and skin. Avoid breathing of vapours and use good ventilation. Like any reactive material, uncured resin and hardener may irritate sensitive skin. Wear protective clothing, goggles and gloves.

**FIRST AID:****Eyes:**

Flush immediately with plenty of water for 15 minutes and obtain medical aid.

**Skin:**

Clean skin with warm water and a soft soap. Never use solvents to remove material from skin.

01/1997

**NOTE:**

The technical data and recommendations contained in this bulletin are correct to the best of our knowledge. The properties shown on this data sheet are not the maximum or minimum values that can be obtained, but only representative data for your guidance. Since the conditions of their use are beyond our control, no warranty or guarantee, expressed or implied, is made for the materials herein described, by us or any of our dealers. We suggest that you evaluate the information presented prior to use. Neither we nor any of our dealers represent or warrant that the materials or their use thereof, either alone or in combination with other materials, will not infringe a patent or patents owned by third parties.



Technical Data Sheet

**ELECTRICAL COMPOUNDS**

1207

**CLEAR CASTING SYSTEM**

**Description:**

Our 1207 is a two component, 100% solid, epoxy system that cures at room temperature. It has a fast cure rate, a good rigidity and clarity. This system is suitable for clear casting.

**Use:**

May be used for printed circuit board or for casting where internal components can be viewed easily.

**Typical uncured properties:**

Components	Mixing Ratio		Specific Gravity	Viscosity Brookfield @ 25 <sup>o</sup> C mPa.s (cps)	Packaging		Color
	By weight # Parts	By volume # Parts			Kg		
Resin	100	100	1.12	3 600 - 3 800	21.55	224.00	Clear light yellow
Hardener	16	19	0.96	10 - 20	3.45	36.00	Clear
Mix			1.09	1 600 - 1 700	25.00	260.00	Clear light yellow

**Gel time:**

Minutes	Temp. °C	Mass (gr.)
25 - 30	22	130

**Coverage:**

One (1) kg covers approximately 900 cm<sup>3</sup> (55 in<sup>3</sup>).

**Typical cured property:**

Minimum cure schedule for 7 days @ 22°C

Hardness, Shore D: 88

**Mixing:**

1. Mix 1207 resin only with 1207 hardener.
2. Do not use damaged or leaking containers.
3. Premix resin and hardener separately. Then place the hardener into the resin container according to the required mixing ratio.
4. Blend the hardener into the resin thoroughly using a paddle attached to a low speed heavy duty electric drill at 300-600 rpm. Continue to mix for a minimum of 3 minutes or until the mix becomes homogeneous.
5. Never dilute with solvents.

**Cleaning of tools:**

Tools and equipment should be cleaned immediately after use with Tri-Tex's #17 solvent or with Tri-Tex's "Clean tool" #4 for a safer use.

**Storage:**

Keep containers closed until just before use at a temperature above 15°C.

**Caution:**

Keep resin and hardener away from eyes and skin. Avoid breathing of vapours and use good ventilation. Like any reactive material, uncured resin and hardener may irritate sensitive skin. Wear protective clothing, goggles and gloves.

**FIRST AID:**

**Eyes:**

Flush immediately with plenty of water for 15 minutes and obtain medical aid.

**Skin:**

Clean skin with warm water and a soft soap. Never use solvents to remove material from skin.

12/1996

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Technical Data Sheet

**ELECTRICAL COMPOUND**

1208

**FLAME RETARDANT AND FLEXIBLE CASTING SYSTEM**

**UL94V-0 #E234134**

**Description:**

Our 1208 epoxy system is a two component, 100 % solid, epoxy system that cures at room temperature. It is a low viscosity system with an intermediate gel time, a low exothermic reaction and low linear shrinkage. It exhibits an excellent flexibility and thermal shock resistance. This system has a black glossy finish look. The 1208 has flame retardant characteristics that meet UL94V-0 standards.

**Use:**

May be used as an encapsulating and a potting compound for applications where flame-out criteria and thermal shock resistance are required.

**Typical uncured properties:**

Components	Mixing Ratio		Specific Gravity	Viscosity ASTM D-2393 Brookfield @ 25 <sup>0</sup> C mPa.s (cps)	Packaging			Color
	By weight # Parts	By volume # Parts			Kg			
Resin	100	100	1.63	9 000 - 13 000	4.42	22.12	304.60	Black
Hardener	13	21	0.99	50 - 100	0.58	2.88	39.60	Clear
Mix			1.52	1 500 - 2 000	5.00	25.00	344.20	Black

**Gel time (ASTM D-2471):**

Minutes	Temp. °C	Mass (gr.)
80 - 100	22	150

**Coverage:**

One (1) kg covers approximately 650 cm<sup>3</sup> to 700 cm<sup>3</sup> (39 in<sup>3</sup> to 43 in<sup>3</sup>).

**Typical cured properties:**

Minimum cure schedule for 7 days @ 22°C

	ASTM	
Tensile strength, psi:	D-638	7 000 - 8 000
Heat deflection temperature @ 264 psi, °C:	D-648	35 - 40
Flammability test, 5 x 1/2 x 1/4 in:	UL 94 V-0	PASSED
Hardness, Shore D:	D-2240	87-88
Elongation, %:	D-638	4 - 6
Water absorption, %:	--	0.2

**Cured electrical properties:**

	ASTM			
Volume resistivity (ohm.cm)	D-257	4.1E + 14		
Dielectric Strength (volts/mil)	D-149	830		
		<b>1 KHz</b>	<b>10 KHz</b>	<b>100 KHz</b>
Dielectric constant (K), 25°C:	D-150	4.30	4.30	4.30
Dissipation factor (D), 25°C:	D-150	0.26	0.20	0.19

**Mixing:**

1. Mix 1208 resin only with 1208 hardener.
2. Do not use damaged or leaking containers.
3. Premix resin and hardener separately. Then place the hardener into the resin container according to the required mixing ratio.
4. Blend the hardener into the resin thoroughly using a paddle attached to a low speed heavy duty electric drill at 300-600 rpm. Continue to mix for a minimum of 3 minutes or until the mix becomes homogeneous.
5. Never dilute with solvents.

**Cleaning of tools:**

Tools and equipment should be cleaned immediately after use with Tri-Tex's #17 solvent or with Tri-Tex's "Clean tool" #4 for a safer use.

**Storage:**

Keep containers closed until just before use at a temperature above 15°C.

**Caution:**

Keep resin and hardener away from eyes and skin. Avoid breathing of vapours and use good ventilation. Like any reactive material, uncured resin and hardener may irritate sensitive skin. Wear protective clothing, goggles and gloves.

**FIRST AID:****Eyes:**

Flush immediately with plenty of water for 15 minutes and obtain medical aid.

**Skin:**

Clean skin with warm water and a soft soap. Never use solvents to remove material from skin.

01/2003

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Technical Data Sheet

**ELECTRICAL COMPOUND**

*1208S*

**FLAME RETARDANT AND FLEXIBLE CASTING SYSTEM**

**(Slow gel)**

**Description:**

Our 1208S epoxy system is a two component, 100 % solid, epoxy system that cures at room temperature. It is a low viscosity system, a slow gel time, a low exothermic reaction and low linear shrinkage. It exhibits an excellent flexibility, thermal shock resistance and flame retardance. This system has a black glossy finish look.

**Use:**

May be used as an encapsulating and a potting compound for applications where flame-out criteria and thermal shock resistance are required.

**Typical uncured properties:**

Components	Mixing Ratio		Specific Gravity	Viscosity ASTM D-2393 Brookfield @ 25 <sup>0</sup> C mPa.s (cps)	Packaging		Color
	By weight # Parts	By volume # Parts			Kg		
Resin	100	100	1.58	10 000 - 15 000			Black
Hardener	18	29	0.99	50 - 100			Clear
Mix			1.45	1 500 - 2 000	0.00	0.00	Black

**Gel time:**

Minutes	Temp. °C	Mass (gr.)
120 - 150	22	150

**Coverage:**

One (1) kg covers approximately 650 cm<sup>3</sup> to 700 cm<sup>3</sup> (39 in<sup>3</sup> to 43 in<sup>3</sup>).

**Typical cured properties:**

Minimum cure schedule for 7 days @ 22°C

	ASTM	
Tensile strength, psi:	D-638	7 000 - 8 000
Heat deflection temperature @ 264 psi, °C:	D-648	35 - 40
Hardness, Shore D:	D-2240	85-87
Elongation, %:	D-638	4 - 6
Water absorption, %:	--	0.2

**Cured electrical properties:**

(Estimation)

	ASTM			
Volume resistivity (omh.cm)	D-257	4.1E + 14		
Dielectric Strenght (volts/mil)	D-149	830		
		<b>1 Khz</b>	<b>10 Khz</b>	<b>100 Khz</b>
Dielectric constant (K), 25°C:	D-150	4.30	4.30	4.30
Dissipation factor (D), 25°C:	D-150	0.26	0.20	0.19

**Mixing:**

1. Mix 1208S resin only with 1208S hardener.
2. Do not use damaged or leaking containers.
3. Premix resin and hardener separately. Then place the hardener into the resin container according to the required mixing ratio.
4. Blend the hardener into the resin thoroughly using a paddle attached to a low speed heavy duty electric drill at 300-600 rpm. Continue to mix for a minimum of 3 minutes or until the mix becomes homogeneous.
5. Never dilute with solvents.

**Cleaning of tools:**

Tools and equipment should be cleaned immediately after use with Tri-Tex's #17 solvent or with Tri-Tex's "Clean tool" #4 for a safer use.

**Storage:**

Keep containers closed until just before use at a temperature above 15°C.

**Caution:**

Keep resin and hardener away from eyes and skin. Avoid breathing of vapours and use good ventilation. Like any reactive material, uncured resin and hardener may irritate sensitive skin. Wear protective clothing, goggles and gloves.

**FIRST AID:**Eyes:

Flush immediately with plenty of water for 15 minutes and obtain medical aid.

Skin:

Clean skin with warm water and a soft soap. Never use solvents to remove material from skin.

02/2004

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Technical Data Sheet

**ELECTRICAL COMPOUND**

*1209*

**FLAME-OUT AND FLEXIBLE CASTING SYSTEM**

**Description:**

Our 1209 epoxy system is a two component, 100 % solid, epoxy system that cures at room temperature. It is a low viscosity system with a long gel time, a low exothermic reaction and low linear shrinkage. It is flexible enough to resist to thermal shocks ranging from -40°C to 130°C and it has a self-extinguishing epoxy compound according to ASTM D-635 and UL 94V-0.

**Use:**

May be used as an encapsulating and a potting compound for high voltage applications where flame-out criteria and thermal shock resistance are required.

**Typical uncured properties:**

Components	Mixing Ratio		Specific Gravity	Viscosity ASTM D-2393 Brookfield @ 25 <sup>0</sup> C mPa.s (cps)	Packaging		Color
	By weight # Parts	By volume # Parts			Kg		
Resin	100	100	1.66	60 000-100 000	67.20	672.00	Black
Hardener	28	50	0.95	200-500	19.00	190.50	Amber
Mix			1.43	3 000-5 000	86.20	862.50	Black

**Gel time (ASTM D-2471):**

Minutes	Temp. °C	Mass (gr.)
180	22	150

**Coverage:**

One (1) kg covers approximately 650 cm<sup>3</sup> to 700 cm<sup>3</sup> (39 in<sup>3</sup> to 43 in<sup>3</sup>).

**Typical cured properties:**

Minimum cure schedule for 7 days @ 22°C

	ASTM	
Tensile strength, psi:	D-638	5 000
Heat deflection temperature @ 264 psi, °C:	D-648	90
Flexural strength, psi:	D-790	8 000
Flexural modulus, psi:	D-790	60 x 10 <sup>6</sup>
Compression strength, psi:	D-695	11 000
Compression modulus, psi:	D-695	50 x 10 <sup>6</sup>
Impact resistance, IZOD:	D-256	0.22
Linear shrinkage, %:	D-2566	0.0012
Thermal expansion coefficient, in/in, °F:	D-696	131 x 10 <sup>-6</sup>
Thermal conductivity, cal x cm/sec x cm <sup>2</sup> x °C:	D-2214	6 x 10 <sup>-4</sup>
Flammability test, 5 x 1/2 x 1/4 in:	UL 94 V-0	Passed
Hardness, Shore D:	D-2240	80
Elongation, %:	D-638	8.0
Water absorption, %:	--	0.45

**Cured electrical properties:**

	ASTM	0.1 Khz	100 Khz
Dielectric constant (K), 25°C:	D-150	5.66	4.30
Dissipation factor (D), 25°C:	D-150	0.100	0.045
Volume resistivity	D-257	2.0 x 10 <sup>12</sup>	2.0 x 10 <sup>12</sup>

Guided to operating class, IEEE 105°C

**Mixing:**

1. Mix 1209 resin only with 1209 hardener.
2. Do not use damaged or leaking containers.
3. Premix resin and hardener separately. Then place the hardener into the resin container according to the required mixing ratio.
4. Blend the hardener into the resin thoroughly using a paddle attached to a low speed heavy duty electric drill at 300-600 rpm. Continue to mix for a minimum of 3 minutes or until the mix becomes homogeneous.
5. Never dilute with solvents.

**Cleaning of tools:**

Tools and equipment should be cleaned immediately after use with Tri-Tex's #17 solvent or with Tri-Tex's "Clean tool" #4 for a safer use.

**Storage:**

Keep containers closed until just before use at a temperature above 15°C.

**Caution:**

Keep resin and hardener away from eyes and skin. Avoid breathing of vapours and use good ventilation. Like any reactive material, uncured resin and hardener may irritate sensitive skin. Wear protective clothing, goggles and gloves.

**FIRST AID:**Eyes:

Flush immediately with plenty of water for 15 minutes and obtain medical aid.

Skin:

Clean skin with warm water and a soft soap. Never use solvents to remove material from skin.

07/2001

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**Technical Data Sheet  
ELECTRICAL COMPOUND**

**1221**

**FLEXIBLE CASTING SYSTEM**

**Description:**

Our 1221 epoxy system is a two component, 100 % solid, epoxy system that cures at room temperature. It is a system with a long gel time, a low exothermic reaction and low linear shrinkage. It is flexible enough to resist to thermal shocks ranging from -40°C to 130°C.

**Use:**

May be used as an encapsulating and potting compound for high voltage applications, solenoid coils, transformers, resistors, etc.

**Typical uncured properties:**

Components	Mixing Ratio		Specific Gravity	Viscosity ASTM D-2393 Brookfield @ 25 <sup>o</sup> C mPa.s (cps)	Packaging			Color
	By weight # Parts	By volume # Parts			Kg			
Resin	100	100	1.52	6 000-8 000	16.00			Black
Hardener	25	39	0.97	8 000-12 000	4.00			Amber
Mix			1.37	7 000-9 000	20.00			Black

**Gel time (ASTM D-2471):**

Minutes	Temp. °C	Mass (gr.)
180-210	22	150

**Coverage:**

One (1) kg covers approximately 650 cm<sup>3</sup> to 700 cm<sup>3</sup> (39 in<sup>3</sup> to 43 in<sup>3</sup>).

**Typical cured properties:**

Minimum cure schedule for 7 days @ 22°C

	ASTM	
Tensile strength, psi:	D-638	8 200
Heat deflection temperature @ 264 psi, °C:	D-648	80
Flexural strength, psi:	D-790	14 500
Flexural modulus, psi:	D-790	N/A
Compression strength, psi:	D-695	16 500
Compression modulus, psi:	D-695	N/A
Impact resistance, IZOD:	D-256	0.35
Linear shrinkage, %:	D-2566	0.32
Thermal expansion coefficient, in/in, °F:	D-696	$4.4 \times 10^{-5}$
Thermal conductivity, cal x cm/sec x cm <sup>2</sup> x °C:	D-2214	N/A
Flammability test, 5 x 1/2 x 1/4 in:	UL 94 V-0	N/A
Hardness, Shore D:	D-2240	85-90
Elongation, %:	D-638	4.0
Water absorption, %:	--	0.2

**Cured electrical properties:**

	ASTM	10 Khz	100 Khz
Dielectric constant (K), 25°C:	D-150	4.9	4.80
Dissipation factor (D), 25°C:	D-150	0.012	0.018
Volume resistivity	D-257	$2.5 \times 10^{15}$	N/A

Guided to operating class, IEEE 90°C

**Mixing:**

1. Mix 1221 resin only with 1221 hardener.
2. Do not use damaged or leaking containers.
3. Premix resin and hardener separately. Then place the hardener into the resin container according to the required mixing ratio.
4. Blend the hardener into the resin thoroughly using a paddle attached to a low speed heavy duty electric drill at 300-600 rpm. Continue to mix for a minimum of 3 minutes or until the mix becomes homogeneous.
5. Never dilute with solvents.

**Cleaning of tools:**

Tools and equipment should be cleaned immediately after use with Tri-Tex's #17 solvent or with Tri-Tex's "Clean tool" #4 for a safer use.

**Storage:**

Keep containers closed until just before use at a temperature above 15°C.

**Caution:**

Keep resin and hardener away from eyes and skin. Avoid breathing of vapours and use good ventilation. Like any reactive material, uncured resin and hardener may irritate sensitive skin. Wear protective clothing, goggles and gloves.

**FIRST AID:****Eyes:**

Flush immediately with plenty of water for 15 minutes and obtain medical aid.

**Skin:**

Clean skin with warm water and a soft soap. Never use solvents to remove material from skin.

12/2003

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Technical Data Sheet

**ELECTRICAL COMPOUND**

1247

**ELECTRICAL ENCAPSULATION**

**“LONG GEL TIME”**

**Description:**

The 1247 is a two component, 100% solid, room temperature cure epoxy system. This system has low viscosity and long gel time. It also has a low exothermic, low linear shrinkage and good thermal shock resistance.

**Use:**

May be used to encapsulate transformers or other electrical components.

**Typical uncured properties:**

Components	Mixing Ratio		Specific Gravity	Viscosity	Packaging			Color
	By weight # Parts	By volume # Parts			Kg			
Resin	100		1.64	24 000-28 000	4.54	22.70		Black
Hardener	10		1.01	900-1 000	0.46	2.30		Amber
Mix			1.55	4 000-6 000	5.00	25.00		Black

**Gel time:**

Minutes	Temp. °C	Mass (gr.)
90-110	22	150

**Coverage:**

One (1) kg covers approximately 645 cm<sup>3</sup> (39 in<sup>3</sup>).

TDS-1247-2/2

**Typical cured properties:**

Minimum cure schedule for 48 hours @ 22<sup>0</sup> C (72°F).

Hardness, Shore D: 88

**Mixing:**

1. Mix 1247 resin only with 1247 hardener.
2. Do not use damaged or leaking containers.
3. Premix resin and hardener separately. Then place the hardener into the resin container according to the required mixing ratio.
4. Blend the hardener into the resin thoroughly using a paddle attached to a low speed heavy duty electric drill at 300-600 rpm. Continue to mix for a minimum of 3 minutes or until the mix becomes homogeneous.
5. Never dilute with solvents.

**Cleaning of tools:**

Tools and equipment should be cleaned immediately after use with Tri-Tex's #17 solvent or

**Storage:**

Keep containers closed until just before use at a temperature above 15°C.

**Caution:**

Keep resin and hardener away from eyes and skin. Avoid breathing of vapours and use good ventilation. Like any reactive material, uncured resin and hardener may irritate sensitive skin. Wear protective clothing, goggles and gloves.

**First aid:**

Eyes:

Flush immediately with plenty of water for 15 minutes and obtain medical aid.

Skin:

Clean skin with warm water and a soft soap. Never use solvents to remove material from skin.

09/2000

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**Technical Data Sheet**  
**ELECTRICAL COMPOUND**

*1249*

**ENCAPSULATING SYSTEM**

**“FLEXIBLE AND HIGH HEAT RESISTANT”**

**Description:**

Our 1249 epoxy system is a two component, 100% solid, heat cure epoxy system. It has a very long pot life, a very low exothermic and a very low linear shrinkage. It also has exceptional physical and electrical properties.

**Uses:**

May be used for encapsulating transformers, electrical components including applications with high volume.

**Typical uncured properties:**

Components	Mixing Ratio		Specific Gravity	Viscosity ASTMD-2393 Brookfield @ 25 <sup>o</sup> C mPa.s (cps)	Packaging			Color
	By weight # Parts	By volume # Parts			Kg			
Resin	100	100	1.64	35 000 - 40 000	1.50	3.00	15.00	Blue
Hardener	100	100	1.65	22 000 - 25 000	1.50	3.00	15.00	Beige
Mix			1.65	23 000 - 26 000	<b>3.00</b>	<b>6.00</b>	<b>30.00</b>	Blue

**Gel time:**

Minutes	Temp. °C	Mass (gr.)
31	135	150

**Coverage:**

One (1) kg covers approximately 606 cm<sup>3</sup> (36 in<sup>3</sup>).

**Typical cured properties:**

Dielectric constant @ 20°C, @ 100 KHZ:	3.92
Heat deflection temperature @ 264 psi, °C:	46
Hardness, Shore D:	88 - 89
Dissipation factor, %, @ 20°C, @ 100 KHZ:	0.01

**Mixing:**

1. Mix 1249 resin only with 1249 hardener.
2. Do not use damaged or leaking containers.
3. Premix resin and hardener separately. Then place the hardener into the resin container according to the required mixing ratio.
4. Blend the hardener into the resin thoroughly using a paddle attached to a low speed heavy duty electric drill at 300-600 rpm. Continue to mix for a minimum of 3 minutes or until the mix becomes homogeneous.
5. Never dilute with solvents.

**Cleaning of tools:**

Tools and equipment should be cleaned immediately after use with Tri-Tex's #17 solvent or with Tri-Tex's "Clean tool" #4 for a safer use.

**Storage:**

Keep containers closed until just before use at a temperature above 15°C.

**Caution:**

Keep resin and hardener away from eyes and skin. Avoid breathing of vapours and use good ventilation. Like any reactive material, uncured resin and hardener may irritate sensitive skin. Wear protective clothing, goggles and gloves.

**FIRST AID:****Eyes:**

Flush immediately with plenty of water for 15 minutes and obtain medical aid.

**Skin:**

Clean skin with warm water and a soft soap. Never use solvents to remove material from skin.

05/1997

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Technical Data Sheet

**ELECTRICAL COMPOUND**

*1260*

**OPTICAL CLEAR CASTING SYSTEM**

Description:

The 1260 is a two component, 100% solid, epoxy system that cures at room temperature. This system was designed to cast optical clear objects. It has a low viscosity, a long pot life with a low exothermic and a low shrinkage rate. When cured, it offers a good flexibility and a polished appearance.

Uses:

Casting system: May be used as an optical clear casting system.

Coating: May be used as a clear coating system.

Typical uncured properties:

Components	Mixing Ratio		Specific Gravity	Viscosity	Packaging			Color
	By weight # Parts	By volume # Parts			Kg			
Resin	100	100	1.15	3000-4000 Brookfield @ 25° C mPa.s (cps)	3.70	18.50		Clear
Hardener	35	43	0.95	10 - 20	1.30	6.50		Clear
Mix			1.09	250-350	5.00	25.00		Clear

Gel time:

Gel time Minutes	Temp. °C	Mass (gr.)
720	22	150

Coverage:

One (1) kg covers approximately 900 cm<sup>3</sup> (54.92 in<sup>3</sup>)

**Typical cured properties (estimation):**

Minimum cure schedule for 7 days @ 22° C (72° F).

Tensile strength, psi:	9 000-10 000
Flexural strength, psi:	10 000 - 12 000
Elongation (%) :	2-3
Izod impact strength (ft-lb/in) : (7 days at 22° C)	0.2
Izod impact strength (ft-lb/in) : (postcured 5 hrs at 80° C)	1.1
Hardness, Shore D:	75 - 78
Linear shrinkage, %:	0.001

**Mixing:**

1. Mix 1260 resin only with 1260 hardener.
2. Do not use damaged or leaking containers.
3. Premix resin and hardener separately. Then place the hardener into the resin container according to the required mixing ratio.
4. Blend the hardener into the resin thoroughly using a paddle attached to a low speed heavy duty electric drill at 300-600 rpm. Continue to mix for a minimum of 3 minutes or until the mix becomes homogeneous.
5. Never dilute with solvents.

**Cleaning of tools:**

Tools and equipment should be cleaned immediately after use with Tri-Tex's #17 solvent or with Tri-Tex's "Clean tool" #4 for a safer use.

**Storage:**

Keep containers closed until just before use at a temperature above 15°C.

**Caution:**

Keep resin and hardener away from eyes and skin. Avoid breathing of vapours and use good ventilation. Like any reactive material, uncured resin and hardener may irritate sensitive skin. Wear protective clothing, goggles and gloves.

**First aid:**

Eyes: Flush immediately with plenty of water for 15 minutes and obtain medical aid.

Skin: Clean skin with warm water and a soft soap. Never use solvents to remove material from skin.

03/2001

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Technical Data Sheet

**ELECTRICAL INSULATING**

*1290*

**SEALING AND ENCAPSULATING SYSTEM**

**Description:**

The 1290 is a two component 100% solid, that cures at room temperature. It is a blue thixotropic gel. It has a simple mixing ratio by volume, an excellent adhesion, good impact resistance and electrical properties along with a remarkable resistance to water and humidity.

**Use:**

May be used for application as a sealant for aluminium plates and as electrical encapsulation.

**Typical uncured properties:**

Components	Mixing Ratio		Specific Gravity	Viscosity Brookfield @ 25 <sup>o</sup> C mPa.s (cps)	Packaging			Color
	By weight # Parts	By volume # Parts			Kg			
Resin	100	100	1.18	70 000-100 000		47.20		Translucent
Hardener	44	50	1.04	70 000-100 000		20.80		Dark blue
Mix			1.13	70 000-100 000		<b>68.00</b>		Sky blue

**Gel time:**

Minutes	Temp. °C	Mass (gr.)
25-30	22	150

**Coverage:**

One (1) kg covers approximately 885 cm<sup>3</sup> (54 in<sup>3</sup>).

**Typical cured properties:**

Minimum cure schedule for 2 days @ 22°C (72°F).

**Pre-treatment of surfaces:**

The surface of the mold should be properly prepared. Wood or plaster molds should be sealed with several coats of nitrocellulose brushing lacquer. Apply three or four coats of Tri-Tex's film forming release agent #10. Gently remove any excess with a brush or a cloth.

**Mixing:**

1. Mix 1290 resin only with 1290 hardener.
2. Do not use damaged or leaking containers.
3. Premix resin and hardener separately. Then place the hardener into the resin container according to the required mixing ratio.
4. Blend the hardener into the resin thoroughly using a paddle attached to a low speed heavy duty electric drill at 300-600 rpm. Continue to mix for a minimum of 3 minutes or until the mix becomes homogeneous.
5. Never dilute with solvents.

**Cleaning of tools:**

Tools and equipment should be cleaned immediately after use with Tri-Tex's #17 solvent or with Tri-Tex's "Clean tool" #4 for a safer use.

**Storage:**

Keep containers closed until just before use at a temperature above 15°C.

**Caution:**

Keep resin and hardener away from eyes and skin. Avoid breathing of vapours and use good ventilation. Like any reactive material, uncured resin and hardener may irritate sensitive skin. Wear protective clothing, goggles and gloves.

**First aid:****Eyes:**

Flush immediately with plenty of water for 15 minutes and obtain medical aid.

**Skin:**

Clean skin with warm water and a soft soap. Never use solvents to remove material from skin.

03/2005

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Technical Data Sheet

**ELECTRICAL INSULATING**

1296

**ELECTRONIC ENCAPSULATING SYSTEM**

**"HIGH IMPACT RESISTANCE AND SELF-EXTINGUISHING"**

**"UL 94V-0"**

**Description:**

The 1296 is a two component, 100% solid, epoxy system that cures at room temperature. It has an exceptional toughness, resiliency and thermal shock resistance. It also has an outstanding impact resistance and excellent electronic properties. This system is self-extinguishing and was tested by an independent laboratory to meet UL 94V-0 (Vertical test "Flammability of plastic materials").

**Use:**

May be used for encapsulating and potting various electronic components, for aerospace, automotive and other high-performance applications.

**Typical uncured properties:**

Components	Mixing Ratio		Specific Gravity	Viscosity	Packaging			Color
	By weight # Parts	By volume # Parts			Kg			
Resin	100	100	1.66	60 000-80 000	4.55	22.73	336.00	Black
Hardener	10	17	1.00	10	0.45	2.27	33.60	Clear
Mix			1.56	4 000-5 000	5.00	25.00	369.60	Black

**Gel time:**

Minutes	Temp. °C	Mass (gr.)
180-200	22	150

**Coverage:**

One (1) kg covers approximately 633 cm<sup>3</sup> (38 in<sup>3</sup>).

**Typical cured properties:**

Minimum cure schedule for 7 days @ 22°C (72°F).

	ASTM	
Tensile strength, psi:	D-638	9 500
Heat deflection temperature @ 264 psi, °C:	D-648	120
Flexural strength, psi:	D-790	13 000
Compression strength, psi:	D-695	12 500
Impact resistance, IZOD:	D-256	0.39
Linear shrinkage, %:	D-2566	0.26
Thermal expansion coefficient, in/in, °F:	D-696	3.90 x 10 <sup>-5</sup>
Flammability test, 5 x 1/2 x 1/4 in:	UL 94 V-0	Passed
Hardness, Shore D:	D-2240	88-90
Elongation, %:	D-638	5.0

**Cured electrical properties at 25°C (77°F):**

	ASTM	1 Khz	10 Khz	100 Khz
Dielectric constant (K), 25°C:	D-150	4.50	4.50	4.50
Dissipation factor (D), 25°C:	D-150	0.019	0.014	0.019
Volume resistivity	D-257	4.0 x 10 <sup>15</sup>	4.0 x 10 <sup>15</sup>	4.0 x 10 <sup>15</sup>
Surface resistivity in ohms	D-257	1.0 x 10 <sup>16</sup>	1.0 x 10 <sup>16</sup>	1.0 x 10 <sup>16</sup>

Guided to operating class, IEEE 105°C (221°F)

**Cured electrical properties at 155°C (311°F):**

	ASTM	1 Khz	10 Khz	100 Khz
Dielectric constant (K), 155°C:	D-150	6.60	6.20	7.60
Dissipation factor (D), 155°C:	D-150	0.067	0.056	0.095
Volume resistivity	D-257	1.0 x 10 <sup>12</sup>	1.0 x 10 <sup>12</sup>	1.0 x 10 <sup>12</sup>
Surface resistivity in ohms	D-257	1.0 x 10 <sup>12</sup>	1.0 x 10 <sup>12</sup>	1.0 x 10 <sup>12</sup>

Guided to operating class, IEEE 105°C (221°F)

**Pre-treatment of surfaces:**

The surface of the container used for potting or encapsulating should be properly prepared. Before encapsulating, apply three or four coats of Tri-Tex's film forming release agent #10. Gently remove any excess with a brush or a cloth.

**Mixing:**

1. Mix 1296 resin only with 1296 hardener.
2. Do not use damaged or leaking containers.
3. Premix resin and hardener separately. Then place the hardener into the resin container according to the required mixing ratio.
4. Blend the hardener into the resin thoroughly using a paddle attached to a low speed heavy duty electric drill at 300-600 rpm. Continue to mix for a minimum of 3 minutes or until the mix becomes homogeneous.
5. Never dilute with solvents.

**Cleaning of tools:**

Tools and equipment should be cleaned immediately after use with Tri-Tex's #17 solvent or with Tri-Tex's "Clean tool" #4 for a safer use.

**Storage:**

Keep containers closed until just before use at a temperature above 15°C.

**Caution:**

Keep resin and hardener away from eyes and skin. Avoid breathing of vapours and use good ventilation. Like any reactive material, uncured resin and hardener may irritate sensitive skin. Wear protective clothing, goggles and gloves.

**First aid:**

Eyes:

Flush immediately with plenty of water for 15 minutes and obtain medical aid.

Skin:

Clean skin with warm water and a soft soap. Never use solvents to remove material from skin.

11/2004

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**Technical bulletin**

**ELECTRICAL COMPOUND**

**L-1635**

**ELECTRICAL ENCAPSULATION**

**ONE COMPONENT, LOW VISCOSITY, FLEXIBLE**

**Description:**

The L-1635 is a one component, heat curing electrical encapsulating system. It is unfilled and has low viscosity convenience for dipping process. Once completely cured, it offers an excellent flexibility and can be used in the applications where reduction of wire vibration is required and thermal shock resistance is important.

**Use(s):**

- Encapsulating and potting for electrical components.
- Dipping compound for transformers.

**Typical uncured properties:**

Specific gravity: 1.05  
 Viscosity (cps): 800 – 1 100  
 Color: Amber  
 Packaging: to be determined  
 Shelf life: 6 months (est.)

**Gel Time:**

Minutes	Temp. °C	Mass (gr.)
38-42	120	150

**Coverage:**

1 kg covers approximately 950 cm<sup>3</sup> (58 po<sup>3</sup>).

TB-L-1635-2/2

**[[For HIGH HEAT]]**

**Cure schedule:**

Number of hours	Temperature °C
4	120

**Typical cured properties:**

According to cure schedule above.

Linear shrinkage, %:	0.07
Hardness, Shore D:	68-60
Water absorption, (immersion 24 hrs), %:	0.01

**Cleaning of tools:**

Tools and equipment should be cleaned immediately after use with Tri-Tex's #17 solvent or with Tri-Tex's "Clean tool" #4 for a safer use.

**Storage:**

Keep containers closed until just before use at a temperature above 15°C.

**Caution:**

Keep resin and hardener away from eyes and skin. Avoid breathing of vapours and use good ventilation. Like any reactive material, uncured resin and hardener may irritate sensitive skin. Wear protective clothing, goggles and gloves.

**First aid:**

Eyes:

Flush immediately with plenty of water for 15 minutes and obtain medical aid.

Skin:

Clean skin with warm water and a soft soap. Never use solvents to remove material from skin.

01/2002

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**Technical Data Sheet  
ELECTRICAL COMPOUND**

*L-1763*

**ADHESIVE PASTE FOR STATORS**

**(Long pot life, flexible)**

**Description:**

Our L-1763 is a two component, 100 % solid, room temperature cure epoxy system. It offers one fast and simple application for protection of stators. The paste is an alternative solution of encapsulation resin for an effective protection against contaminants, abrasive materials, chemical products and vibration. It has long working time, low exothermic, low shrinkage and excellent thermal shock resistance.

**Use:**

The L-1763 is used mainly to encapsulate and to protect stators; it can also be used as an adhesive for various materials where good adhesion and general mechanical strength is required.

**Typical uncured properties:**

Components	Mixing Ratio		Specific Gravity	Viscosity ASTM D-2393 Brookfield @ 25 <sup>o</sup> C mPa.s (cps)	Packaging			Color
	By weight # Parts	By volume # Parts			Kg			
Resin	100	100	1.66	900000-1200000				Blue
Hardener	50	50	1.65	800000-1000000				Yellow
Mix			1.66	900000-1200000	0.00	0.00	0.00	Green

**Gel time (ASTM D-2471):**

Minutes	Temp. °C	Mass (gr.)
240-300	22	150

**Coverage:**

One (1) kg covers approximately 600 cm<sup>3</sup> 39 in<sup>3</sup>).

**Typical cured properties:**

Minimum cure schedule for 7 days @ 22°C

	ASTM	
Linear shrinkage, %:	D-2566	0.0012
Hardness, Shore D:	D-2240	88-90

**Mixing:**

1. Mix L-1763 resin only with L-1763 hardener.
2. Do not use damaged or leaking containers.
3. Premix resin and hardener separately. Then place the hardener into the resin container according to the required mixing ratio
4. Blend the hardener into the resin thoroughly using a paddle attached to a low speed heavy duty electric drill at 300-600 rpm. Continue to mix for a minimum of 3 minutes or until the mix becomes homogeneous.
5. Never dilute with solvents.

**Cleaning of tools:**

Tools and equipment should be cleaned immediately after use with Tri-Tex's #17 solvent or with Tri-Tex's "Clean tool" #4 for a safer use.

**Storage:**

Keep containers closed until just before use at a temperature above 15°C.

**Caution:**

Keep resin and hardener away from eyes and skin. Avoid breathing of vapours and use good ventilation. Like any reactive material, uncured resin and hardener may irritate sensitive skin. Wear protective clothing, goggles and gloves.

**FIRST AID:****Eyes:**

Flush immediately with plenty of water for 15 minutes and obtain medical aid.

**Skin:**

Clean skin with warm water and a soft soap. Never use solvents to remove material from skin.

06/2005

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***Tri-Tex***  
*co inc.*



***URETHANE***

***Technical Data Sheets***



## EP-0056 A/B CASTING URETHANE

Version 2008

### PRODUCT TYPE:

Formulated casting urethane system.

### SUGGESTED USES:

EP-0056 A/B is a red coloured, rigid, filled, low temperature heat curing polyurethane resin system. EP-0056 A/B exhibits when cured excellent mechanical strength, excellent resistance to elevated temperature, good resistance to water and chemicals, and good electrical properties at both room and elevated temperatures.

EP-0056A,B has a self-extinguishing urethane compound according to ASTM 635 and UL-94 V-I

### PHYSICAL PROPERTIES & GENERAL INFORMATION:

	PART A	PART B	Mixed
Colour	Red	Amber	Red
Viscosity (CPS) @ 25°C	15000-25000	180-200	
%Solids by weight	100 %	100 %	100 %
Cleaner	S-0128	S-0128	S-0128
Density (kg/l)	1.50	1.23	1.38
Mix ratio by weight	100	44	
Pot life (144 g @ 25°C)			25-35 minutes
Flammability b UL 94 V-1			<30 s
Cure schedule			3-4 hours/302 deg F

### OPERATING CONDITIONS:

EP-0056 A/B is used for potting and encapsulating. Use standard equipment and standard procedure for making castings.

Bring the part A to 140-150 deg F and keep the part B at room temperature. Mix A/B for 2-3 minutes. Cast in a mould at a temperature 175 deg F, in an oven at 175-180 deg F for 15 - 20 minutes. De-mould and post cure 3-4 hours at 240-250 deg F.

Keep in a cool dry place, away from flame and oxidising chemicals. The storage life is at least 1 year.

## PHYSICAL PROPERTIES OF CURED EP-0056

PROPERTIES	APPLICABLE ASTM STD	VALUE
Hardness, shore D	<b>D-2240</b>	<b>85-90</b>
Dielectric constant 1000HZ, 30 C	<b>D-150</b>	<b>4.1 - 4.5</b>
Dielectric strength (V/mil. 1/8")	<b>D-149</b>	<b>300-400</b>
Volume resistivity (ohm-cm)	<b>D-257</b>	<b>4.1-4.5 x 10<sup>14</sup></b>
Coefficient of thermal expansion (86-194 deg F)	<b>D-696</b>	<b>35-45 X 10<sup>-6</sup></b>
Heat distortion (deg C ( 264 PSI)	<b>D-648</b>	<b>110-115</b>
LINEAR SHRINKAGE(%) )	<b>D-2256</b>	<b>0.2-0.4</b>
TENSILE STRENGTH ( PSI)	<b>D-638</b>	<b>9000-10000</b>
Moisture absorption, (24 hrs immersion at 20 C)	<b>D-570</b>	<b>0.20 - 0.40</b> <b>(in percent)</b>
FLEXURAL STRENGTH (PSI)	<b>D-790</b>	<b>15000-17000</b>
Elongation at yield(%)	<b>D-638</b>	<b>1-2</b>
Arc Resistance	<b>D-495</b>	<b>135 sec</b>

### PRECAUTION

Use good personal hygiene. Store material in a cool, dry place. Shelf life is one year in original sealed container. Consult the Material Safety Data Sheet for further cautionary information.



**URETHANE  
ELECTRICAL COMPOUND**

*U82000*

**ELECTRICAL ENCAPSULATION**

**(Flexible - Flameout)**

**Description:**

The U82 000 is a two component, low viscosity, 100% solid polyurethane system specifically designed to encapsulate transformers and other electrical components. It has a low shrinkage, a low exothermic with a good flexibility and a good thermal shock resistance.

**Use:**

May be used for high and medium voltage encapsulation.

**Typical uncured properties:**

Components	Mixing Ratio		Specific Gravity	Viscosity Brookfield @ 25 <sup>o</sup> C mPa.s (cps)	Packaging			Color
	By weight # Parts	By volume # Parts			Kg			
Part A	100	--	1.52	9 000-11 000	4.35	21.75	304.00	Black
Part B	15	--	1.23	40-70	0.65	3.25	45.60	Ambre
Mix			1.28	3 000-4 000	5.00	25.00	349.60	Black

**Gel time:**

Pot life Minutes	Gel Time Minutes	Temp. °C	
		Temp. °C	Mass (gr.)
40-50	70-80	22	150

**Coverage:**

One (1) kg covers approximately 750 cm<sup>3</sup> (45 in<sup>3</sup>).

**Typical cured properties:**

Minimum cure schedule for 7 days at 22°C.

Tensile strength, psi:	1200-1400
Linear shrinkage, in/in:	0.005
Hardness, Shore A:	88-90
Elongation, %:	80
Water absorption (24 Hrs), %:	0.1

**Cured electrical properties:**

Dielectric constant (K) at 20 KHz.:	D-150	4.22
Dielectric constant (K) at 100 KHz.:	D-150	4.00
Dielectric strength at 23°C, V/Mil.:	D-149	400
Dissipation factor (D) at 20 KHz.:	D-150	0.032
Dissipation factor (D) at 100 KHz.:	D-150	0.028
Thermal shock 10 cycles	D-1674-67	-40°C\150°C
Surface resistivity in ohms at 22°C	D-257	3.5 X 10 <sup>E13</sup>

**Mixing:**

1. Mix U82 000 Part A only with U82 000 Part B.
2. Do not use damaged or leaking containers.
3. Premix Part A and Part B separately. Then place Part A into the Part B container according to the required mixing ratio.
4. Blend Part A into Part B thoroughly using a paddle attached to a low speed heavy duty electric drill at 300-600 rpm. Continue to mix for a minimum of 3 minutes or until the mix becomes homogeneous.
5. Never dilute with solvents.

**Cleaning of tools:**

Tools and equipment should be cleaned immediately after use with Tri-Tex's #17 solvent or with Tri-Tex's "Clean tool" #4 for a safer use.

**Storage:**

Keep containers closed until just before use at a temperature above 15°C.

**Caution:**

Keep Part A and Part B away from eyes and skin. Avoid breathing of vapours and use good ventilation. Like any reactive material, uncured Part A and Part B may irritate sensitive skin. Wear protective clothing, goggles and gloves.

**FIRST Aid:**Eyes:

Flush immediately with plenty of water for 15 minutes and obtain medical aid.

Skin:

Clean skin with warm water and a soft soap. Never use solvents to remove material from skin.

11-10-97

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**Technical bulletin**

**URETHANE**

*U82005*

**ELECTRICAL ENCAPSULATION  
(FLEXIBLE, INTERMEDIATE POT LIFE)**

**Description:**

The U82005 is a two component, 100% solid, low viscosity, polyurethane system that cures at room temperature. It is designed to encapsulate electrical components. It has a low shrinkage, a low exothermic, a good flexibility and a good thermal shock resistance.

**Use:**

May be used for high and medium voltage encapsulation.

**Typical uncured properties:**

Components	Mixing Ratio		Specific Gravity	Viscosity	Packaging			Color
	By weight # Parts	By volume # Parts			Kg			
Part A	100	100	0.96	900-1 000	3.17	9.60	19.20	Yellow
Part B	39	30	1.24	180-250	1.23	3.74	7.44	Amber
Mix			1.02	600-800	4.40	13.34	26.64	Yellow

**Gel time:**

Pot life (Minutes)	Gel Time (Minutes)		
		Temp. °C	Mass (gr.)
25-30	40-45	22	150

**Coverage:**

One (1) kg covers approximately 1 000 cm<sup>3</sup> (61 in<sup>3</sup>).

**Typical cured properties:**

Minimum cure schedule for 7 days at 22°C (72°).

Water absorption (24 hrs), %	0.1
Hardness, Shore D:	70

**Cured electrical properties:****ASTM**

Thermal shock, 10 cycles

D-1674-67

-15°C/80°C

**Mixing:**

1. Mix U82005 Part A only with U82005 Part B.
2. Do not use damaged or leaking containers.
3. Premix Part A and Part B separately. Then place Part A into the Part B container according to the required mixing ratio.
4. Blend Part A into Part B thoroughly using a paddle attached to a low speed heavy duty electric drill at 300-600 rpm. Continue to mix for a minimum of 3 minutes or until the mix becomes homogeneous.
5. Never dilute with solvents.

**Cleaning of tools:**

Tools and equipment should be cleaned immediately after use with Tri-Tex's #17 solvent or with Tri-Tex's "Clean tool" #4 for a safer use.

**Storage:**

Keep containers closed until just before use at a temperature above 15°C.

**Caution:**

Keep Part A and Part B away from eyes and skin. Avoid breathing of vapours and use good ventilation. Like any reactive material, uncured Part A and Part B may irritate sensitive skin. Wear protective clothing, goggles and gloves.

**First aid:****Eyes:**

Flush immediately with plenty of water for 15 minutes and obtain medical aid.

**Skin:**

Clean skin with warm water and a soft soap. Never use solvents to remove material from skin.

06/2000

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**URETHANE**  
**U82030**  
**ELECTRICAL ENCAPSULATION SYSTEM**  
**"RIGID, FAST SETTING"**

**Description:**

The U82030 is a two component, 100% solid polyurethane system that cures at room temperature. It has a low shrinkage, a medium exothermic, a good rigidity and a good thermal shock resistance.

**Use:**

May be used to encapsulate transformers and other electronic or electrical low and medium voltage compounds

**Typical uncured properties:**

Components	Mixing Ratio		Specific Gravity	Viscosity	Packaging			Color
	By weight # Parts	By volume # Parts			Kg			
Part A	100	100	1.52	6 000-8 000	3.90			Black
Part B	28	35	1.24	40 - 80	1.10			Amber
Mix			1.45	2 500-4 000	5.00			Black

**Gel time:**

Pot life (Minutes)	Gel Time (Minutes)	Temp. °C	
		Temp. °C	Mass (gr.)
13-18	25-30	22	150

**Typical cured properties:**

Minimum cure schedule for 7 days at 22°C (72°).

Linear shrinkage, (%)	0.4
Water absorption (24 hrs), %	0.15
Hardness, Shore D:	83-85

**Cured electrical properties:**

Dissipation factor (100 KHz, 22°C) = 0.017

**Pre-treatment of surfaces:**

The surface of the mold should be properly prepared, that is dry and clean. All traces of impurities should be eliminated. Before encapsulating, apply three or four coats of Tri-Tax's film forming release agent #10. Gently remove any excess with a brush or a cloth.

**Mixing:**

1. Mix U82030 Part A only with U82030 Part B.
2. Do not use damaged or leaking containers.
3. Premix Part A and Part B separately. Then place Part A into the Part B container according to the required mixing ratio.
4. Blend Part A into Part B thoroughly using a paddle attached to a low speed heavy duty electric drill at 300-600 rpm. Continue to mix for a minimum of 3 minutes or until the mix becomes homogeneous.
5. Never dilute with solvents.

**Cleaning of tools:**

Tools and equipment should be cleaned immediately after use with Tri-Tax's #17 solvent or with Tri-Tax's "Clean tool" #4 for a safer use.

**Storage:**

Keep containers closed until just before use at a temperature above 15°C.

**Caution:**

Keep Part A and Part B away from eyes and skin. Avoid breathing of vapours and use good ventilation. Like any reactive material, uncured Part A and Part B may irritate sensitive skin. Wear protective clothing, goggles and gloves.

**First aid:****Eyes:**

Flush immediately with plenty of water for 15 minutes and obtain medical aid.

**Skin:**

Clean skin with warm water and a soft soap. Never use solvents to remove material from skin.

06/2001

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**URETHANE  
ELECTRICAL COMPOUND**

*U82051*

**ELECTRICAL ENCAPSULATION  
(FLEXIBLE, FAST SETTING)**

**Description:**

The U82051 is a two component, 100% solid, polyurethane system that cures at room temperature. This low viscosity system has a low shrinkage, a low exothermic, a good flexibility and a good thermal shock resistance.

**Use:**

May be used to encapsulate transformers and other low and medium voltage electrical compounds.

**Typical uncured properties:**

Components	Mixing Ratio		Specific Gravity	Viscosity	Packaging			Color
	By weight # Parts	By volume # Parts			Kg			
Part A	100	100	1.53	15 000-20 000	4.10	20.49	306.00	Grey
Part B	22	27	1.24	200 - 300	0.90	4.51	67.32	Amber
Mix			1.47	3 000- 6 000	5.00	25.00	373.32	Grey

**Gel time:**

Pot life (Minutes)	Gel Time (Minutes)	Temp. °C	Mass (gr.)
		5-10	10-15

**Coverage:**

One (1) kg covers approximately 680 cm<sup>3</sup> (41 in<sup>3</sup>).

**Typical cured properties:**

Minimum cure schedule for 7 days at 22°C (72°F).

Linear shrinkage, in.	0.003-0.004
Water absorption (24 hrs), %	0.1
Hardness, Shore D:	68-72

**Cured electrical properties:**

	ASTM	
Dielectric constant (K) at 20 KHz:	D-150	4.22
Dielectric constant (K) at 100 KHz:	D-150	4.00
Dielectric strength at 22°C, V/Mil:	D-149	400
Thermal shock, 10 cycles	D-1674-67	-40°C / 150°C
Dissipation factor, 100 KHz at 22°C:	D-150	0.021

**Mixing:**

1. Mix U82051 Part A only with U82051 Part B.
2. Do not use damaged or leaking containers.
3. Premix Part A and Part B separately. Then place Part A into the Part B container according to the required mixing ratio.
4. Blend Part A into Part B thoroughly using a paddle attached to a low speed heavy duty electric drill at 300-600 rpm. Continue to mix for a minimum of 3 minutes or until the mix becomes homogeneous.
5. Never dilute with solvents.

**Cleaning of tools:**

Tools and equipment should be cleaned immediately after use with Tri-Tax's #17 solvent or with Tri-Tax's "Clean tool" #4 for a safer use.

**Storage:**

Keep containers closed until just before use at a temperature above 15°C.

**Caution:**

Keep Part A and Part B away from eyes and skin. Avoid breathing of vapours and use good ventilation. Like any reactive material, uncured Part A and Part B may irritate sensitive skin. Wear protective clothing, goggles and gloves.

**First aid:****Eyes:**

Flush immediately with plenty of water for 15 minutes and obtain medical aid.

**Skin:**

Clean skin with warm water and a soft soap. Never use solvents to remove material from skin.

03/2001

**NOTE:**

The technical data and recommendations contained in this bulletin are correct to the best of our knowledge. The properties shown on this data sheet are not the maximum or minimum values that can be obtained, but only representative data for your guidance. Since the conditions of their use are beyond our control, no warranty or guarantee, expressed or implied, is made for the materials herein described, by us or any of our dealers. We suggest that you evaluate the information presented prior to use. Neither we nor any of our dealers represent or warrant that the materials or their use thereof, either alone or in combination with other materials, will not infringe a patent or patents owned by third parties.

***Tri-Tex***  
*co inc.*



***MOLD RELEASE***

***Technical Data Sheets***



# SPN0311 MOLD RELEASE AGENT

Version 2007

**PRODUCT TYPE:**  
**Solvent-silicon based**

**SUGGESTED USES:**

**SPN0311 is a solvent based, silicon releasing agent for epoxy molds.**

**TECHNICAL PROPERTIES:**

<b>Colour:</b>	<b>Clear transparent</b>
<b>Odour:</b>	<b>Naphthanic</b>
<b>Consistency:</b>	<b>Liquid</b>
<b>% Solids by weight:</b>	<b>7-9%</b>
<b>Specific Gravity:</b>	<b>0.68-0.69 kg/l</b>

**Shelf Life: 6 months in sealed containers at room temperature (NB: Keep from freezing).**

**SAFETY INSTRUCTIONS**

**Extremely flammable, poison. For industrial use Only. Keep away from heat, open flame, spark and pilot lights. Use only under well ventilated conditions. Harmful or fatal if swallowed. Vapour harmful. Avoid splashing in eyes.**

**FIRST AID TREATMENT**

**If splashed in eyes or on skin, flush with water. If swallowed, do not induce vomiting; give 3 or 4 Glass of milk or water. Call a physician Immediately. If spilled on clothing remove quickly.**



## EMR-0600 MOLD RELEASE AGENT

Version 2007

### PRODUCT TYPE:

**Solvent-silicon based**

### SUGGESTED USES:

**EMR-0600 is a solvent based, silicon releasing agent for epoxy molds.**

### TECHNICAL PROPERTIES:

<b>Colour:</b>	<b>Clear transparent</b>
<b>Odour:</b>	<b>Naphthanic</b>
<b>Consistency:</b>	<b>Liquid</b>
<b>% Solids by weight:</b>	<b>10</b>
<b>Specific Gravity:</b>	<b>0.694 kg/l</b>

**Shelf Life: 6 months in sealed containers room temperature (NB: Keep from freezing).**

### SAFETY INSTRUCTIONS

**Extremely flammable, poison. For industrial use only. Keep away from heat, open flame, spark and pilot lights. Use only under well ventilated conditions. Harmful or fatal if swallowed. Vapour harmful. Avoid splashing in eyes.**

### FIRST AID TREATMENT

**If splashed in eyes or on skin, flush with water. If swallowed, do not induce vomiting; give 3 or 4 glass of milk or water. Call a physician immediately. If spilled on clothing remove quickly.**



## Notice

*The information and suggestions in this brochure are presented in good faith and are based on data we deem to be reliable. This brochure does not present any claims or guarantees, expressed or implied, with regard to the information, data, and suggestions, herein, and with regard to any failure to recognize patents or other rights of third parties. We undertake to respect the conditions governing the sale of the products listed. All the suggestions must be considered in accordance with their appropriateness, and consequently, if necessary, they must be modified in accordance with local conditions and materials used.*

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