



# Liquid Tape Electrical

## Brush-on or Spray-on Electrical Insulation

plastidip.net.au

# Getting Unraveled?



**Don't Tape It...  
Spray it, Dip it  
or Brush it!**

Performix Brand® Liquid Tape Insulation Coating is being used on electrical connections everywhere—even in hard-to-reach areas where traditional electrical tape can be difficult to work with. From speaker cables to circuit boards; automotive projects to toggle switches; extension cords to underground wiring; terminal blocks to underwater aquarium pumps. It appears that our product's best applications are yet to be discovered.

Try some today and find out why Performix Brand® products are the consumer's choice since 1972.

**Will not harden,  
unravel or become  
brittle in extreme  
weather conditions**

### TECHNICAL INFORMATION:

#### SPECIFICATIONS:

- Durometer shore A (ASTMD2240) 70
- Dielectric (ASTM D-149) 1,400 v/mil
- Solids (wt.) 24% Salt spray (ASTM B-117) passed 1,000 hours
- Tensile (ASTM D-638) 2,500psi
- Weatherability (ASTM G-53) 3-5 years
- Elongation (ASTM D-638) 500%
- Temperature use range: -30°F (-34.4°C) to 200°F (93.3°C).
- Cut resistance (ASTM D-1044) very good
- Stone abrasion (ASTM D-3170) excellent
- Viscosity range: 7,000 - 22,000 cps
- Shelf life: 1 year at 77°F (25°C) (unopened)
- Permeability (ASTM E-96) .03 grains/sq. ft./hr. (3.23 grains/ m2/ hr).
- Coverage: 30 sq.ft. per gallon at 15 mils (2.79m2 per 3.78L at 0.38mm)
- Chemical resistance: Acids, alkalines, pollutants: excellent  
Petroleum: limited

#### SURFACE PREPARATION:

Wires, terminals or all other surfaces must be clean, dry, and free of all oils, grease, wax and loose rust. Stir gently with brush applicator cap to avoid producing bubbles.

#### MIX WELL BEFORE USE. USE ADEQUATE VENTILATION.

Gently mix before each use. Apply wet overlapping coats using the brush cap. Allow 10-20 minutes (dry to the touch) dry time before applying additional coats to desired thickness. A minimum of 2-3 coats are recommended for best results. Allow 24 hours to fully cure.

#### CAUTION:

Turn off power before starting electrical work and follow your local electrical codes. Minimal 2 coats required (5+ mils/0.127+mm) to assure good dielectric protection.

**HINTS:** Allow 4 hours dry time per coat before use. Allow overnight drying whenever possible. Avoid excessive air movement, heat or humidity. Always use proper ventilation and protection.

#### ADDITIONAL APPLICATION IDEAS

- |                    |                      |                   |
|--------------------|----------------------|-------------------|
| Landscape Lighting | * Cables Electronics | * Gauges          |
| Outlet Boxes       | * Underground Wiring | * Circuit Boards  |
| Controls           | * Valves / Actuators | * Alarms / Sirens |
| Distributors       | * Junction Boxes     | * Sensors         |
| Sleeves for LEDs   | * Robot Electronics  |                   |

### Liquid Tape Electrical Insulation

Liquid Tape, a rubber insulation coating that exhibits excellent acid, alkaline, abrasion protection and seals out moisture and salt permanently. Liquid Tape has the strongest dielectric protection on the market; 1,200 v/mil, 5 - 7 mils per coat. Our rubber based coating will not harden, unravel or become brittle in extreme weather conditions like our competitors' vinyl based product.

Available in:

118ml Brush-In-Cap Carded, in Red, White, and Black.

170 gram Aerosol Spray in Black and Clear.



**LIQUID TAPE's  
flexible rubber  
formula won't crack,  
chip, peel or  
harden.**

**Use LET Spray for  
easy application for  
hard to reach places.**



**Finally!  
Liquid Tape in a  
sprayable can.**

Far better than sticky cable seal or silicone and now even easier to use! Special nozzle keeps overspray to a minimum. Takes the place of electrical tape by providing electrical insulation to hard-to-reach places. Pinpoints circuit board connections and it's reusable.

### USAGE:

**Insulates cables  
electronics  
outdoor lighting  
underground wiring  
alarms  
security systems  
utility trailers**



**Provides a solid connection**



**Protect electrical connections**

**on wires, cables,  
alarms, electronics**

### Available Colours:



Red Black White



Black Clear

# LIQUID TAPE

## ~ELECTRICAL~ BRUSH-ON INSULATION



### DESCRIPTION:

LIQUID TAPE is an air dry synthetic rubber coating that can be easily brushed on and exhibits excellent moisture, acids, alkalines, abrasion and dielectric resistance. LIQUID TAPE is available in red, black, green and white. LIQUID TAPE can be used in many applications including electrical connections for boats, trailers, RV's, trucks, automobiles, timers, pool electricals, bilge pumps, sprinkler pumps, instruments, computers, circuit boards, switches, etc... LIQUID TAPE won't crack, peel or harden and remains flexible - even under extreme conditions. Use to insulate, protect and colour code. Stops terminal screws from vibrating loose.

### SPECIFICATIONS:

Durometer shore A (ASTMD2240) 70

Solids (wt.) 24%

Tensile (ASTM D-638) 2,500psi

Elongation (ASTM D-638) 500%

Cut resistance (ASTM D-1044) very good

Viscosity range: 7,000 - 22,000 cps

Permeability (ASTM E-96)

.03 grains/sq. ft./hr.

(3.23 grains/ m<sup>2</sup>/ hr).

Chemical resistance:

Acids, alkalines, pollutants: excellent

Petroleum: limited

Dielectric (ASTM D-149) 1,400 v/mil

Salt spray (ASTM B-117) passed 1,000 hours

Weather ability (ASTM G-53) 3-5 years

Temperature use range: -30°F (-34.4°C) to 200°F (93.3°C).

Stone abrasion (ASTM D-3170) excellent

Shelf life: 1 year at 77°F (25°C)

Coverage: 30 sq.ft. per gallon at 15 mils  
(2.79m<sup>2</sup> per 3.78L at 0.38mm).

\*For information on ASTM's please visit <http://www.astm.org/>

### SURFACE PREPARATION:

Wires, terminals or all other surfaces must be clean, dry, and free of all oils, grease, wax and loose rust. Stir gently with brush applicator cap to avoid producing bubbles.

### MIX WELL BEFORE USE. USE ADEQUATE VENTILATION.

Gently mix before each use. Apply wet overlapping coats using the brush cap. Allow 10-20 minutes (dry to the touch) dry time before applying additional coats to desired thickness. A minimum of 2-3 coats are recommended for best results. Allow 24 hours to fully cure.

### CAUTION:

Turn off power before starting electrical work and follow your local electrical codes. Minimal 2 coats required (5+ mils/0.127+mm) to assure good dielectric protection.

### HINTS:

**Allow 4 hours dry time per coat before use.** Allow overnight drying whenever possible. Avoid excessive air movement, heat or humidity. Always use proper ventilation and protection.

### ADDITIONAL APPLICATION IDEAS

Landscape Lighting

Outlet Boxes

Sensors

Junction Boxes

Cables

Underground Wiring

Valves / Actuators

Sleeves for LEDS

Electronics

Circuit Boards

Alarms / Sirens

Robot Electronics

Gauges

Controls

Distributors

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Should you need further assistance, please contact:

**PLASTIC DIPS & COATINGS**

**56 Slade Road, BARDWELL PARK. NSW 2207**

**Phone: (02) 9599 8858 Fax: (02) 9599 8859**

**Email: [sales@plastidip.net.au](mailto:sales@plastidip.net.au)**

[plastidip.net.au](http://plastidip.net.au)

## **PLASTI DIP AND LIQUID TAPE ELECTRICAL CHEMICAL AND SOLVENT RECOMMENDATIONS**

### **AUTOMOTIVE**

<b>PROTECTION AGAINST</b>	<b>RECOMMENDATION</b>
Motor Oil	Not recommended
Engine Coolant	Although product offers some protection, film will soften
Gasoline	Not recommended
Washer Fluid	Excellent choice
Grease	Although product offers some protection, film will soften
Axle Lubricant	Although product offers some protection, film will soften
Brake Fluid	Although product offers some protection, film will soften
Battery Acid	Excellent choice
Highway Salt-Water	Excellent choice
Manure or Urine	Excellent choice
Truck and Car Chassis	Excellent choice (frame, wheels and motor)

### **HOUSHOLD**

<b>PROTECTION AGAINST</b>	<b>RECOMMENDATION</b>
Chlorine (Bleach) Solution	Excellent choice
Detergent Solution	Excellent choice
Ammonia Solution	Excellent choice
Salt-Water	Excellent choice
Animal Waste and Urine	Excellent choice
Kerosene / Oils	Not recommended
Drain Cleaners	Excellent choice
Turpentine	Not recommended

### **INDUSTRIAL**

<b>PROTECTION AGAINST</b>	<b>RECOMMENDATION</b>
Chlorinated Solvents	Not recommended
Ketones	Not recommended
Alcohols	Although product offers some protection, film will soften
Acids Used in Plating	Excellent choice
Acids Used in Etching Glass	Excellent choice
Caustics Used in Metal Treatment	Excellent choice
Caustics Used Commercially	Excellent choice



**TEST RESULTS CONCERNING PLASTI DIP & LIQUID TAPE  
ELECTRICAL CHEMICAL RESISTANCE**

<u>CHEMICALS USED</u>	<u>STRENGTH</u>	<u>TEMPERATURE</u>	<u>RESISTANCE</u>
Ferric Chloride	100%	150 degrees F	Slight staining and softness of film
H <sub>2</sub> SO <sub>4</sub>	5%	100 degrees F	Pass
Potassium Hydroxide	3%	150 degrees F	Pass
Potassium Permanganate	3%	150 degrees F	Film stable – noticed staining
Sodium Hydroxide	10%	210 degrees F.	Noticed softness of film
Hydrochloric Acid	100%	Room Temp	Pass
Oxalic Acid	50%	Room Temp	Film stable in chemical / water solution
Fluoroboric Acid	25%	Room Temp	Pass
Tin/Lead – salt plating solution	100%	Room Temp	Pass
Copper – salt plating solution	100%	Room Temp	Pass
Gold Cyanide – plating solution	100%	140 degrees F.	Pass
Sodium Carbonate	10%	210 degrees F.	Pass
Sodium Hydroxide	10%	120 degrees F.	Noticed softness of film
Ammonia Hydroxide	100%	100 degrees F	Pass
Methyl Ethyl Ketone	100%	Room Temp	Fail
Ethyl Alcohol	100%	Room Temp	Pass

APRIL 2002

**M&P EXPORT MANAGEMENT  
CORPORATION****2329 STATE HIGHWAY 34  
MANASQUAN, NJ 08736****To[: 732.223.0160  
Fax: 7 32.223.8745  
Fax: 732.223.4162****[email: mpexportlt@mpexport.com](mailto:mpexportlt@mpexport.com)  
[www.mpexport.com](http://www.mpexport.com)****Date: 12/15/06****1 of 9****Fax. 011 61 7 416 63618****Company:** Kevin Corry Pty.

City:

**State/Country:** Australia**Attention:** Wendy & Kevin**Subject**

From: Mike

Dear Wendy and Kevin,

Per your request, following please find Dielectric Test Data for Plastid Dip. It includes test data for several competitive products. I am not sure if the competitive products are still available.

For your information, they refer to the thickness of the coating in "mils". A mil is one thousandth of an inch or 0.0254mm. A single coating of Plasti Dip is normally 6 - 8 mils, or .1524 - .2032mm.

Hope it Helps\_

Regards,

*Mike*

**STORK****Twin City Testing Corporation****PROJECT NUMBER: 1800 01 30298****PAGE: 1 of 3****DATE: February 1, 2001****STORK \ TWIN CITY TESTING CORPORATION**

662 Crownwell Avenue

St. Paul, Minnesota 55114

Phone: (651) 659-7300 Fax: (651) 659-7348

**DIELECTRIC TESTS ON  
THERMOPLASTIC RUBBER COATING**

Prepared for:

PDI, Incorporated

Attn: Mark Kenow

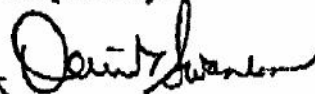
PO BOX 130

3760 Flowerfield Rd

Circle Pines, MN 55014

Client Purchase Order Number: Verbal

Prepared By:



for Kevin Stafsholt  
Mechanical Engineering Technician  
Mechanical/Metallurgical Department  
Phone: (651) 659-7350

Reviewed By:



Stephen L. Van Krevelen  
Project Manager  
Mechanical/Metallurgical Department  
Phone (651) 659-7410

The test results contained in this report are representative only to the time period or samples submitted for testing. The measurements obtained on any other given day or similar sample may vary.

An Affirmative Action



Equal Opportunity Employer

PROJECT NUMBER: 1800 01 30298

PAGE: 2 of 3

DATE: February 1, 2001

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**INTRODUCTION:**

This report presents the results of dielectric strength testing conducted on twenty (20) thermoplastic rubber coating specimens, conducted using the methodology of ASTM D149. Mr. Mark Kenow of PDI INC submitted the specimens to our laboratory on January 26, 2001.

The scope of work was limited to conducting the dielectric strength tests on the specimens submitted and providing a report of the results. The testing was completed on January 30, 2001.

**SUMMARY OF RESULTS:**

<u>Specimen</u>	<u>Thickness (mil)</u>	<u>Voltage (kV)</u>	<u>Volts/mil</u>
Red 1	8.3	> 10	> 1200
Red 2	7.7	> 10	> 1300
Red 3	8.3	> 10	> 1200
Red 4	8.3	> 10	> 1200
Red 5	8.2	> 10	> 1220
Red 6	8.2	> 10	> 1220
Red 7	8.0	> 10	> 1250
Red 8	8.9	> 10	> 1120
Red 9	8.5	9.0	1060
Red 10	7.7	> 10	> 1300
Black 1	8.2	> 10	> 1220
Black 2	7.3	> 10	> 1370
Black 3	7.8	> 10	> 1280
Black 4	8.3	> 10	> 1200
Black 5	8.7	> 10	> 1150
Black 6	7.5	10.0	1330
Black 7	7.7	> 10	> 1300
Black 8	7.7	> 10	> 1300
Black 9	8.0	> 10	> 1250
Black 10	8.2	> 10	> 1220

Discarding the high and low measurements, and averaging the results yields the following:

Red : > 1210 V/mil

Black : > 1240 V/mil

**SPECIMEN DESCRIPTION:**

Twenty (20) "Performix Brand Plasti Dip F-720" specimens, approximately 3" x 3", Ten (10) Black, Ten (10) Red.

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PROJECT NUMBER: 1800 01 30298

PAGE: 3 of 3  
DATE: February 1, 2001

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**TEST METHODS:**

The test was conducted using the methodology of ASTM:D149. Samples were tested using Alternating Current. Electrodes (2 ea.) were machined from Brass round stock to a diameter of 1.00 inches. The test sample was placed between the electrodes. The probes of the Dielectric tester were attached to the electrodes.

The voltage was increased slowly to 10,000 VDC. These conditions were maintained for a period of 1 minute. After this period, the voltage was slowly reduced to 0 VDC. During this period, observations were made for evidence of breakdown.

This procedure was repeated on an additional 19 samples.

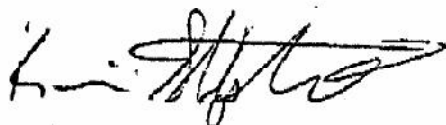
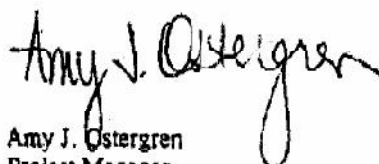
**TEST EQUIPMENT:**

Mitutoyo Micrometer, MM 160-016, S/N 14862, Calibrated 4/28/00, Due 4/28/01

Model HD 100 Series HIPOT Tester, MM180-012, Calibrated 12/7/00, Due 12/7/01

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**STORK®****Twin City Testing Corporation**862 Cromwell Avenue, St. Paul, MN 55114-1776  
(651) 645-3601, Fax: (651) 659-7348**PROJECT NUMBER:** 3018 01 31023.2**PAGE:** 1 of 2  
**DATE:** October 9, 2001**DIELECTRIC TESTS ON  
THERMOPLASTIC RUBBER COATING****Prepared for:****Plasti Dip International**  
Attn: Mark Kenow  
3920 Pheasant Ridge Dr.  
Blaine, MN 55449**Client Purchase Order Number:** Verbal - Mark**Prepared By:****Kevin Stafsholt**  
Mechanical Engineering Technician  
Product Testing Department  
Phone: (651) 659-7350**Reviewed By:****Amy J. Ostergren**  
Project Manager  
Product Testing Department  
Phone (651) 659-7303

The test results contained in this report are representative only to the time period or samples submitted for testing. The measurements obtained on any other given day or similar sample may vary.

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PROJECT NUMBER: 3018 01 31023.2

PAGE: 2 of 2

DATE: October 9, 2001

**INTRODUCTION:**

This report presents the results of dielectric strength testing conducted on "Rustoleum Grip & Guard" film, conducted using the methodology of ASTM D149. Mr. Mark Kenow of PDI INC submitted the specimens to our laboratory on September 28, 2001.

The scope of work was limited to conducting the dielectric strength tests on the specimens submitted and providing a report of the results. The testing was completed on October 9, 2001.

**SUMMARY OF RESULTS:**

<u>Specimen</u>	<u>Thickness (mil)</u>	<u>Voltage (kV)</u>	<u>Volts/mil</u>
1	8.2	6.6	800
2	7.5	3.6	480
3	7.5	5.5	730
4	8.2	7.6	930
5	8.0	1.2	150
6	8.5	4.4	530
7	8.2	5.0	610
8	8.2	4.4	540
9	8.5	4.8	560

Discarding the high and low measurements, and averaging the results yields a value of 630 V/mil

**SPECIMEN DESCRIPTION:**

A total of three strips of "Grip & Guard Rustoleum", Lot No. F14261, applied over silicone release paper, were submitted for testing. These strips were cut into nine (9) specimens, approximately 2" x 2 1/2".

**TEST METHODS:**

The test was conducted using the methodology of ASTM D149. Samples were tested using Alternating Current. Electrodes (2 ea.) were machined from Brass round stock to a diameter of 1.00 inches. The test sample was placed between the electrodes. The probes of the Dielectric tester were attached to the electrodes.

The voltage was increased slowly to 10,000 VDC or until failure occurred. Failure was determined to be a breakdown in the material that allowed at least 5mA of current to pass between the electrodes.

This procedure was repeated on an additional 8 specimens.

**TEST EQUIPMENT:**

Mitutoyo Micrometer, ID No. 0006565, Calibrated 5/26/01 Due 5/26/02

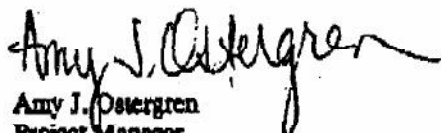
Model HD 100 Series HIPOT Tester, MM180-012, Calibrated 12/7/00, Due 12/7/01

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**STORK®****Twin City Testing Corporation**662 Cromwell Avenue, St. Paul, MN 55114-1776  
(651) 645-3601, Fax: (651) 659-7348**PROJECT NUMBER: 3018 02 31439.2****PAGE: 1 of 3**  
**DATE: February 26, 2002****DIELECTRIC TESTS ON  
THERMOPLASTIC RUBBER COATING****PREPARED FOR**Plasti Dip International Ltd  
Attn: Mike Kenow  
3917 Pheasant Ridge Dr  
Blaine, MN 55449**Client Purchase Order Number: 12210****Prepared By:**Kevin Stafsholt  
Mechanical Engineering Technician  
Product Testing Department  
Phone: (651) 659-7350**Reviewed By:**Amy J. Ostergren  
Project Manager  
Product Testing Department  
Phone (651) 659-7303

The test results contained in this report are representative only to the time period or samples submitted for testing. The measurements obtained on any other given day or similar sample may vary.

An Affirmative Action



Equal Opportunity Employer

PROJECT NUMBER: 3018 02 31349.2

PAGE: 2 of 3  
DATE: February 26, 2002**INTRODUCTION:**

This report presents the results of dielectric strength testing conducted on "Rubberize It!", "Star Brite Liquid Electrical Tape" and "North American Brush-On Electrical Tape" films, conducted using the methodology of ASTM D149. Mr. Mark Kenow of PDI INC submitted the specimens to our laboratory on February 20, 2002.

The scope of work was limited to conducting the dielectric strength tests on the specimens submitted and providing a report of the results. The testing was completed on February 25, 2002.

**SPECIMEN DESCRIPTION:**

A total of two strips of "Rubberize It!", Lot No. BL1094, one strip of "Star Brite Liquid Electrical Tape", Lot No. J20005 and one strip of "North American Brush-On Electrical Tape" (no lot number given), applied over silicone release paper, were submitted for testing. These strips were cut into as many specimens as possible, while keeping the smallest dimension to at least 2 inches.

**SUMMARY OF RESULTS:**

RUBBERIZE IT!			
Specimen	Thickness (mil)	Voltage (kV)	Volts/mil
1	7.5	3.8	507
2	7.3	8.5	1164
3	7.5	2.6	347
4	7.3	6.3	863
5	7.7	9.0	1169
6	8.3	8.6	1036
7	8.0	5.6	700
8	8.2	6.0	732

NORTH AMERICAN BRUSH-ON ELECTRICAL TAPE <sup>1</sup>			
Specimen	Thickness (mil)	Voltage (kV)	Volts/mil
1	7.0	3.5	500
2	7.5	4.8	640
3	6.7	4.6	687
4	7.7	5.3	688
5	6.7	6.8	985
6	7.2	3.0	417

Note<sup>1</sup>: There was observed to be a scattering of pores in the film. These pores were characterized by circular area of thinner material of diameter between 0.5mm and 1.5mm. The thickness at these points could not be measured and it is not known if the dielectric failures occurred at these points or not.

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PROJECT NUMBER: 3018 02 31349.2

PAGE: 3 of 3  
DATE: February 26, 2002

**SUMMARY OF RESULTS: (cont'd)**

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STAR BRITE LIQUID ELECTRICAL TAPE			
Specimen	Thickness (mil)	Voltage (kV)	Volts/mil
1	6.2	3.5	565
2	7.0	5.8	829
3	5.8	4.3	741
4	5.7	4.4	772
5	4.8	3.0	625
6	4.8	0.4	83
7	6.3	6.5	1032

Note 1: Upon inspection of Specimen 6 following failure it was observed that there appeared a similar scattering of pores as noted with the North American Brush-On Electric Tape. This was not observed with any of the other Star Brite Liquid Electrical Tape specimens.

Discarding the high and low measurements, and averaging the results yields the following values:

RUBBERIZE IT:	834 V/mil
NORTH AMERICAN BRUSH-ON ELECTRIC TAPE:	629 V/mil
STAR BRITE LIQUID ELECTRICAL TAPE:	706 V/mil

**TEST METHODS:**

The test was conducted using the methodology of ASTM D149. Samples were tested using Alternating Current. Electrodes (2 ea.) were machined from Brass round stock to a diameter of 1.00 inches. The test sample was placed between the electrodes. The probes of the Dielectric tester were attached to the electrodes.

The voltage was increased slowly to 10,000 VDC or until failure occurred. Failure was determined to be a breakdown in the material that allowed at least 5mA of current to pass between the electrodes.

This procedure was repeated on all additional specimens of each of the three different films.

**TEST EQUIPMENT:**

Mitutoyo Micrometer, ID No. 0006565, Calibrated 5/26/01 Due 5/26/02

Model HD 100 Series HIPOT Tester, MM180-012, Calibrated 2/13/02, Due 2/13/03

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TOTAL P.07



**MATERIAL SAFETY DATA SHEET****Section 1 - Identification of the Preparation and the Company**

LIQUID TAPE (F825) and PLASTI DIP JR. 7.25 FL. OZ. (F-846, 847)

**This product is classified as hazardous according to the criteria of Safe Work Australia.**

Classified as a Dangerous Good according to the Australian Dangerous Goods Code (ADG).

Uses: Coating

**Address:**Plastic Dips & Coatings  
56 Slade Road  
Bardwell Park  
New South Wales 2207**Telephone:**Tel: (02) 9599 8858  
Fax: (02) 9599 8859

Emergency Tel: 0427 974 344

**Section 2 – Hazards Identification****DANGER**

Flame



Exclamation Mark



Health



Environment

**Hazard Statements**Flammable Liquid 2  
Acute Toxicity 4

Specific Target Organ Toxicity Single Exposure 3

Skin Irritant 2

Eye Irritant 2

Aspiration Toxicity 1

Mutagen 1B

Carcinogen 1B

Reproductive 2

Aquatic Acute 1

Aquatic Chronic 1

H225: Highly flammable liquid and vapour

H332: Harmful if inhaled

H312: Harmful in contact with the skin

H336: May cause drowsiness or dizziness

H315: Causes skin irritation

H319: Causes serious eye irritation

H304: May be fatal if swallowed and enters airways

H340: May cause genetic defects

H350: May cause cancer

H361: Suspected of damaging the unborn child

H400: Very toxic to aquatic life

H410: Very toxic to aquatic life with long lasting effects

**Precautionary Statements****Prevention**

P101 If medical advice is needed, have product container or label at hand

P102 Keep out of reach of children

P202 Do not handle until all safety precautions have been read and understood

P210 Keep away from flames and hot surfaces – No smoking

P260 Do not breathe vapours

P264 Wash hands thoroughly after handling

P270 Do not eat, drink or smoke when using this product

P271 Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves/eye protection/face protection See Section 8.

**Response**

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTRE or doctor/physician.

P302 + P352 IF ON SKIN: Wash with plenty of soap and water

P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

P305 + P313 + P351 + P337 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention

P308 + P313 If exposed or concerned: Get medical advice/attention

P330 Rinse mouth

P331 Do not induce vomiting

P370 + P378 In case of fire: Use carbon dioxide, dry chemical or foam for extinction

**Storage**

P403 + P405 + P233 + P235 Store locked up, in a well-ventilated place. Keep container tightly closed. Keep cool

**Disposal**

P501 Dispose of contents/container to approved landfill

**Section 3 - Composition/Information on Ingredients**

<b>Ingredient(s)</b>	<b>CAS-number</b>	<b>%wt</b>
VM & P Naphtha	64742-89-8	30 - 40
Heptanes, Branched, Cyclic and Linear containing 1-4% n-heptane	142-82-5	426260-76-6
Xylene	108-88-3	10 - 20
Methyl ethyl ketone	78-93-3	<10
Ethylbenzene	100-41-4	<5

**Section 4 – First Aid Measures****Ingestion:**

NEVER GIVE AN UNCONSCIOUS PERSON ANYTHING TO DRINK NOR ATTEMPT TO INDUCE VOMITING. If the person is conscious, rinse mouth out with water ensuring that mouthwash is not swallowed. Give about 250mL (2 glasses) of water to drink. DO NOT attempt to induce vomiting. Seek URGENT medical attention. For advice, contact a Poisons Information Centre (phone e.g. Australia 131 126; New Zealand 0800 764 766).

**Inhalation:**

Remove to fresh air. Keep warm and at rest. If breathing is laboured, hold in a half upright position (this assists respiration). Apply artificial respiration if breathing has stopped. Seek URGENT medical attention for all but the most minor cases of over-exposure.

**Eye Contact:**

If in eyes, IMMEDIATELY hold eyelids apart and flush the eye continuously with running water. Seek medical attention. Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes.

**Skin Contact:**

Remove contaminated clothing. Rinse the affected area with water then wash thoroughly with soap and water. Use water alone, if soap is unavailable. Seek medical attention if any soreness or inflammation of the skin persists or develops later. Launder affected clothing before re-use.

**Advice to Doctor:**

Treat symptomatically

**Section 5 – Fire Fighting Measures**

Highly flammable. Keep away from sources of ignition such as open flames, sparks, hot surfaces or burning cigarettes. Sealed containers may explode if heated.

In case of fire, wear self-contained breathing apparatus. If possible remove containers from the vicinity of the fire. Otherwise keep containers as cool as possible by spraying with water, from a protected position.

Extinguish using carbon dioxide, dry chemical or foam. Water jets are not suitable for fire fighting

**Section 6 – Accidental Release Measures**

Eliminate ignition sources. Vapours are heavier than air and may travel considerable distances to sources of ignition. Wear protective equipment as specified for handling. Increase the ventilation if it is possible to do so. Prevent entry into waterways. Cover with an absorbent such as earth, sand or a commercial oil absorber. Sweep up and collect. Leave to stand in a well-ventilated (preferably outdoor) area where the solvent can evaporate safely. Dispose of residue to approved landfill.

## Section 7 – Handling and Storage

**Storage:**

Store in a flammable liquids area, out of direct sunlight in a cool well ventilated area. Higher temperatures may cause pressure build up inside containers. Protect containers against physical damage.

**Handling:**

Vapours are heavier than air and may spread along floors. Vapours may form explosive mixtures with air. Provide adequate ventilation. Avoid vapour concentrations above the exposure standards. Avoid inhalation of vapour and spray mist. Avoid skin and eye contact. Keep away from sources of ignition – No smoking. For Personal Protective Equipment (PPE), see Section 8.

## Section 8 – Exposure Controls/Personal Protection

**Exposure standards:** Exposure standards have not been allocated to this product. Information for the ingredients is:

<b>VM&amp;P Naphtha</b>	None allocated
<b>Heptane</b>	TWA: 400 ppm, 1,640 mg/m <sup>3</sup> STEL: 500 ppm, 2,050 mg/m <sup>3</sup>
<b>Xylene</b>	TWA: 80 ppm, 350 mg/m <sup>3</sup> STEL: 150 ppm, 655 mg/m <sup>3</sup>
<b>Methyl Ethyl Ketone</b>	TWA: 150 ppm, 445 mg/m <sup>3</sup> STEL: 300 ppm, 890 mg/m <sup>3</sup>
<b>Ethylbenzene</b>	TWA: 100 ppm, 434 mg/m <sup>3</sup> STEL: 125 ppm, 543 mg/m <sup>3</sup>

Exposure standards represent airborne concentrations of individual chemical substances, which according to current knowledge, should neither impair the health nor cause undue discomfort to nearly all workers. Exposure standard may be a time-weighted average (TWA), a short-term exposure limit (STEL) or a peak level.

**Engineering Controls:**

Product may generate high vapour levels in confined or poorly ventilated areas.

Ventilation requirements depend on the quantity of product in use. General (mechanical) ventilation may be adequate for minor use but ventilation must be sufficient to maintain vapour levels below the appropriate exposure standard and fan forced or local exhaust ventilation may be required if using large amounts of this product in a poorly ventilated area.

**Personal Protection:**

Safety glasses and PVC, neoprene, nitrile or butyl rubber gloves should be worn, if necessary to prevent skin contact. A half face respirator with organic solvent vapour filter may be required in poorly ventilated conditions. In confined spaces use air supplied breathing apparatus. N.B. TAKE THE LIMITS OF ABSORPTION CAPACITY INTO ACCOUNT. CHANGE FILTERS REGULARLY.

## Section 9 – Physical and Chemical Properties

**Appearance:** Various colours, honey like liquid with a characteristic odour

**Specific gravity (H2O = 1):** 0.79 – 0.83

**Boiling Point:** 79 – 141°C

**Solubility in Water:** Insoluble

**Vapour Pressure:** 78mmHg @ 20°C

**Vapour density (Air = 1):** Heavier than air.

**Flash Point:** -7°C Method) TCC

**Explosive limits (% By Volume in Air):** 0.9 – 11.5

**% Volatile:** 71 – 74.5

## Section 10 – Stability and Reactivity

Stable under recommended storage and handling conditions (refer to Section 7).

If heated to decomposition or burned, the product may generate carbon monoxide, carbon dioxide, oxides of nitrogen and smoke.

Keep away from oxidising agents, strongly alkaline and acidic materials.

## Section 11 – Toxicological Information

### Symptoms of Exposure:

Exposure to solvent vapour concentrations in excess of the relevant exposure standards (see Section 8) may result in adverse health effects. Symptoms of over exposure include headache, drowsiness, fatigue, dizziness and in extreme cases, loss of consciousness. Prolonged contact may result in absorption through the skin.

### Chronic Health Effects

Chronic exposure may result in damage to the liver, kidneys and central nervous system. Prolonged contact with skin may result in dermatitis.

VM&P Naphtha is listed by the Safe Work Australia as a category 2 Carcinogen i.e. probably carcinogenic to humans. However, adverse health effects are a result of prolonged and repeated over-exposure and this product should pose no serious health risk if the precautions listed in this SDS are followed. Product is inert and non-toxic when cured.

## Section 12 – Ecological Information

### Environmental Fate:

Resin may persist in the environment. However, the product is expected to exist predominantly in the vapour phase and will be rapidly degraded in the atmosphere by reaction with photochemically produced hydroxyl radicals. It is expected to have high mobility in soil and volatilization from moist soil surfaces is expected to be an important fate process.

### Potential to Bioaccumulate:

Negligible for solvent.

## Section 13 – Disposal Considerations

Dispose by controlled incineration or to approved landfill.

## Section 14 – Transport Information

**Proper Shipping Name:** COATING SOLUTION

**UN Number:** 1139

**Class:** 3

**Packing Group:** II

**Hazchem Code:** 3(Y)E

Class 3 Flammable Liquids should not be transported or stored with goods of:  
Class 1 Explosives  
Class 2.1 Flammable Gases (where both flammable liquids and flammable gases are in bulk)  
Class 2.3 Poisonous Gases  
Class 4.2 Spontaneously Combustible Substances  
Class 5.1 Oxidising Agents  
Class 5.2 Organic Peroxides  
Class 7 Radioactive Substances

## Section 15 – Regulatory Information

Product is a schedule 5 Poison according to the requirements of the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).

All ingredients are listed on the Australian Inventory of Chemical Substances (AICS).



#### Section 16 – Other Information

User should verify applicability of this data sheet if more than 5 years old.

The information provided herein is based on data considered accurate. No warranty is expressed or implied regarding the accuracy of the data or the results obtained from its use. Since the information contained herein may be applied under conditions beyond the vendors control and since subsequent data may suggest modification of the information, vendor assumes no responsibility for the results of its use.

**Date of Issue:** 6<sup>th</sup> July 2012

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**MATERIAL SAFETY DATA SHEET****Section 1 - Identification of the Preparation and the Company**

LIQUID TAPE SPRAY

**This product is classified as hazardous according to the criteria of Safe Work Australia.**

Classified as a Dangerous Good according to the Australian Dangerous Goods Code (ADG).

Uses: Coating

**Address:**

Plastic Dips & Coatings  
56 Slade Road  
Bardwell Park  
New South Wales 2207

**Telephone:**

Tel: (02) 9599 8858  
Fax: (02) 9599 8859

Emergency Tel: 0427 974 344

**Section 2 – Hazards Identification****DANGER**

Flame



Exclamation Mark



Health



Environment

**Hazard Statements**

Flammable Liquid 2  
Acute Toxicity 4

Skin Irritant 2

Specific Target Organ Toxicity Single Exposure 3

Eye Irritant 2

Aspiration Toxicity 1

Mutagen 1B

Carcinogen 1B

Aquatic Acute 1

Aquatic Chronic 1

H222 Extremely flammable aerosol

H312: Harmful in contact with skin

H332: Harmful if inhaled

H315: Causes skin irritation,

H336: May cause drowsiness or dizziness

H319: Causes serious eye irritation

H304: May be fatal if swallowed and enters airways

H340: May cause genetic defects

H350: May cause cancer

H400: Very toxic to aquatic life

H410: Very toxic to aquatic life with long lasting effects

**Precautionary Statements****Prevention**

P101 If medical advice is needed, have product container or label at hand

P102 Keep out of reach of children

P202 Do not handle until all safety precautions have been read and understood

P210 Keep away from flames and hot surfaces – No smoking

P211 Do not spray on an open flame or other ignition source

P251 Pressurized container: Do not pierce or burn, even after use.

P260 Do not breathe vapours

P264 Wash hands thoroughly after handling

P270 Do not eat, drink or smoke when using this product

P271 Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves/eye protection/face protection See Section 8.

**Response**

P302 + P352 IF ON SKIN: Wash with plenty of soap and water

P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

P305 + P313 + P351 + P337 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention

P312 Call a POISON CENTRE or doctor/physician if you feel unwell

P370 + P378 In case of fire: Use carbon dioxide, dry chemical or foam for extinction

**Storage**

P410 + P412 Protect from sunlight. Do not expose to temperatures exceeding 50°C / 122°F

**Disposal**

P501 Dispose of contents/container to approved landfill

### Section 3 - Composition/Information on Ingredients

Ingredient(s)	CAS-number	%wt
Propane	74-98-6	20 - 30
VM & P Naphtha	64742-89-8	20 - 30
Heptanes, Branched, Cyclic and Linear containing 1-4% n-heptane	426260-76-6	10 - 20
n-Butane	106-97-8	5 - 10
Xylene	108-88-3	5 - 10
Methyl ethyl ketone	78-93-3	<5
Methyl n-amyl ketone	110-43-0	<5
Ethylbenzene	100-41-4	<5
Carbon black (black only)	1338-86-4	<1

### Section 4 – First Aid Measures

**Ingestion:**

Unlikely to occur considering the packaging of the product but if swallowed NEVER GIVE AN UNCONSCIOUS PERSON ANYTHING TO DRINK NOR ATTEMPT TO INDUCE VOMITING. If the person is conscious, rinse mouth out with water ensuring that mouthwash is not swallowed. Give about 250mL (2 glasses) of water to drink. DO NOT attempt to induce vomiting. Seek URGENT medical attention. For advice, contact a Poisons Information Centre (phone eg Australia 131 126; New Zealand 0800 764 766).

**Inhalation:**

Remove to fresh air. Keep warm and at rest. If breathing is laboured, hold in a half upright position (this assists respiration). Apply artificial respiration if breathing has stopped. Seek URGENT medical attention for all but the most minor cases of over-exposure.

**Eye Contact:**

If in eyes, IMMEDIATELY hold eyelids apart and flush the eye continuously with running water. Seek medical attention. Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes.

**Skin Contact:**

Remove contaminated clothing. Rinse the affected area with water then wash thoroughly with soap and water. Use water alone, if soap is unavailable. Seek medical attention if any soreness or inflammation of the skin persists or develops later. Launder affected clothing before re-use.

**Advice to Doctor:**

Treat symptomatically

### Section 5 – Fire Fighting Measures

Aerosol with highly flammable contents. Do not spray near sources of ignition such as open flames, sparks, hot surfaces or burning cigarettes. Aerosol cans may explode if heated above 54 degrees Celsius.

In case of fire, wear self-contained breathing apparatus. If possible remove containers from the vicinity of the fire. Otherwise keep containers as cool as possible by spraying with water, from a protected position.

Extinguish using carbon dioxide, dry chemical or foam. Water jets are not suitable for fire fighting

### Section 6 – Accidental Release Measures

Eliminate ignition sources. Vapours are heavier than air and may travel considerable distances to sources of ignition. Wear protective equipment as specified for handling. Wipe up with paper towels or similar. Remove leaking aerosols to a well-ventilated (preferably outdoor) area so that the solvent can evaporate safely. Dispose as an empty aerosol container.

## Section 7 – Handling and Storage

**Storage:**

Store out of direct sunlight in a cool well ventilated area. High temperatures may cause pressure build up inside aerosol cans. Protect containers against physical damage.

**Handling:**

Vapours are heavier than air and may spread along floors. Vapours may form explosive mixtures with air. Provide adequate ventilation. Avoid vapour concentration above the exposure standards. Avoid inhalation of vapour and spray mist. Avoid skin or eye contact. Keep aerosols (either full or empty) away from sources of ignition – No smoking. For Personal Protective Equipment (PPE), see Section 8.

## Section 8 – Exposure Controls/Personal Protection

**Exposure standards:** Exposure standards have not been allocated to this product. Information for the ingredients is:

<b>n-Butane</b>	TWA: 800 ppm, 1,900 mg/m <sup>3</sup>
<b>Ethylbenzene</b>	TWA: 100 ppm, 434 mg/m <sup>3</sup> STEL: 125 ppm, 543 mg/m <sup>3</sup>
<b>Heptane</b>	TWA: 400 ppm, 1,640 mg/m <sup>3</sup> STEL: 500 ppm, 2,050 mg/m <sup>3</sup>
<b>Methyl n-amyl ketone</b>	TWA: 500 ppm, 223 mg/m <sup>3</sup>
<b>Methyl ethyl Ketone</b>	TWA: 150 ppm, 445 mg/m <sup>3</sup> STEL: 300 ppm, 890 mg/m <sup>3</sup>
<b>Propane</b>	Asphyxiant
<b>VM&amp;P Naphtha</b>	None allocated
<b>Xylene</b>	TWA: 80 ppm, 350 mg/m <sup>3</sup> STEL: 150 ppm, 655 mg/m <sup>3</sup>

Exposure standards represent airborne concentrations of individual chemical substances, which according to current knowledge, should neither impair the health nor cause undue discomfort to nearly all workers. Exposure standard may be a time-weighted average (TWA), a short-term exposure limit (STEL) or a peak level.

**Engineering Controls:**

Aerosols cans may generate high vapour levels. Do not disregard ventilation requirements because of small product size. Ventilation requirements depend on the quantity of product in use. General (mechanical) ventilation is adequate for minor use but ventilation must be sufficient to maintain vapour levels below the appropriate exposure standard and fan forced or local exhaust ventilation may be required if using large amounts of this product in a poorly ventilated area.

**Personal Protection:**

Safety glasses are adequate for normal use. Avoid spraying onto skin. PVC, neoprene, nitrile or butyl rubber gloves should be worn, if necessary to prevent skin contact. A half face respirator with organic solvent vapour filter may be required in poorly ventilated conditions. In confined spaces use air supplied breathing apparatus. N.B. TAKE THE LIMITS OF ABSORPTION CAPACITY INTO ACCOUNT. CHANGE FILTERS REGULARLY.

## Section 9 – Physical and Chemical Properties

**Appearance:** Various colours, syrupy liquid with a solvent odour

**Specific gravity (H<sub>2</sub>O = 1):** 0.675

**Boiling Point:** 1 – 140°C

**Solubility in Water:** Insoluble

**Vapour Pressure:** 760mmHg @ 20°C

**Vapour density (Air = 1):** Heavier than air.

**Flash Point:** -30°C (Method) TCC

**Explosive limits (% By Volume in Air):** 0.9 – 11.5

**% Volatile:** 87

## Section 10 – Stability and Reactivity

Stable under recommended storage and handling conditions (refer to Section 7).

If heated to decomposition or burned, the product may generate carbon monoxide, carbon dioxide, oxides of nitrogen and smoke.

Keep away from oxidising agents, strongly alkaline and acidic materials.

## Section 11 – Toxicological Information

### Symptoms of Exposure:

Exposure to solvent vapour concentrations in excess of the relevant exposure standards (see Section 8) may result in adverse health effects. Symptoms of over exposure include headache, drowsiness, fatigue, dizziness and in extreme cases, loss of consciousness. Prolonged contact may result in absorption through the skin. Deliberately concentrating and inhaling the contents may be fatal.

### Chronic Health Effects

Chronic exposure may result in damage to the liver, kidneys and central nervous system. Prolonged contact with skin may result in dermatitis.

VM&P Naphtha is listed by the Safe Work Australia as a category 2 Carcinogen i.e. probably carcinogenic to humans. However, adverse health effects are a result of prolonged and repeated over-exposure and this product should pose no serious health risk if the precautions listed in this SDS are followed. Product is inert and non-toxic when cured.

## Section 12 – Ecological Information

### Environmental Fate:

Resin may persist in the environment. Toxic to aquatic organisms. However, the product is expected to exist predominantly in the vapour phase and will be rapidly degraded in the atmosphere by reaction with photochemically produced hydroxyl radicals. It is expected to have high mobility in soil and volatilization from moist soil surfaces is expected to be an important fate process.

### Potential to Bioaccumulate:

Negligible for solvent.

## Section 13 – Disposal Considerations

DO NOT puncture or incinerate empty aerosol containers. Dispose to approved landfill. However, do not dispose to waste that is likely to be incinerated.

## Section 14 – Transport Information

**Proper Shipping Name:** AEROSOLS FLAMMABLE

**UN Number:** 1950

**Class:** 2.1

**Packing Group:** Not Applicable

**Hazchem Code:** 3(Y)E

Class 2.1 Flammable Gases should not be transported or stored with goods of:  
Class 1 Explosives  
Class 3 Flammable Liquids (where both flammable liquids and flammable gases are in bulk)  
Class 4.1 Flammable Solids  
Class 4.2 Spontaneously Combustible Substances  
Class 4.3 Dangerous When Wet Substances  
Class 5.1 Oxidising Agents  
Class 5.2 Organic Peroxides  
Class 7 Radioactive Substances

## Section 15 – Regulatory Information

Product is not a Scheduled Poison according to the requirements of the Standard for the Uniform Scheduling of Medicines

and Poisons (SUSMP).

All ingredients are listed on the Australian Inventory of Chemical Substances (AICS).

#### Section 16 – Other Information

User should verify applicability of this data sheet if more than 5 years old.

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**Date of Issue:** 6<sup>th</sup> July 2012

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