Permatex, Inc. 10 Columbus Blvd. Hartford, CT 06106 USA Telephone: 1-87-Permatex

(877) 376-2839

Emergency: 800-255-3924

International Emergency: 813-248-0585

Material Safety Data Sheet

1. PRODUCT IDENTIFICATION

Product Name: 09117 REAR WINDOW DEFOGGER REPAIR KIT PRS PART 1

Item No:390144BProduct Type:Coating

2. COMPOSITION/INFORMATION ON INGREDIENTS					
Component	Weight%	ACGIH TLV: TWA	OSHA PEL:		
SILVER 7440-22-4	40-50	0.1 mg/m ³ TWA	0.01 mg/m³ TWA		
ETHYL ACETATE 141-78-6	20-30	400 ppm TWA	400 ppm TWA; 1400 mg/m ³ TWA		
ETHANOL 64-17-5	10-20	1000 ppm; STEL 1000 ppm	1000 ppm TWA; 1900 mg/m ³ TWA		
1-METHOXY-2-PROPANOL ACETATE 108-65-6	10-20	Not Listed	Not Listed		
POLY (METHYL METHACRYLATE) 9011-14-7	1-10	Not Listed	Not Listed		
PIGMENT ORANGE #13 3520-72-7	<3	Not Listed	Not Listed		

3. HAZARDS IDENTIFICATION

Toxicity: This material is irritating to skin, eyes and mucous membranes.. High concentrations may cause central

nervous system (CNS) depression. May be fatal if inhaled, absorbed through skin, or swallowed.

Primary Routes of Entry: Eye and skin contact, ingestion, inhalation, Absorption through skin.

Signs and Symptoms of Exposure: Overexposure may cause eye and skin redness, difficulty breathing and vomiting. Excessive accidental

exposure may cause headache, dizziness, nausea and mild respiratory irritation.

Component	Weight%	NTP	ACGIH Carcinogens	IARC
ETHANOL	10-20		A4 - Not Classifiable	Group 1 (drinking alcohol);
64-17-5			as a Human	Vol. 44, pg 35, 1988
			Carcinogen	
POLY (METHYL METHACRYLATE)	1-10			Group 3 Vol. 19, pg 187;
9011-14-7				1979

Medical Conditions Recognized as Being Aggravated by Exposure:

Persons with preexisting respiratory, liver, kidney, eye or skin diseases may be adversely affected.

4. FIRST AID MEASURES

Ingestion: Do not induce vomiting. Slowly dilute with 1-2 glasses of water or milk and seek medical attention. Never

give anything by mouth to an unconscious person.

Inhalation: Move to fresh air in case of accidental inhalation of vapours. Oxygen or artificial respiration if needed.

Obtain medical attention.

Skin Contact: Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. If skin

irritation persists, call a physician.

Eye Contact: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical

attention if irritation persists.

5. FIRE FIGHTING MEASURES

Flash Point (°F/C):

Recommended Extinguishing Media: Carbon Dioxide, Dry Chemicals, Foam.

Special Fire-Fighting Procedures: Firefighters should wear self-contained breathing apparatus.

Hazardous Products of Combustion: Oxides of carbon

Unusual Fire/Explosion Hazards: Closed containers may rupture or explode when exposed to extreme heat.

Product Name: 09117 REAR WINDOW DEFOGGER <u>Item No:</u> 390144B

REPAIR KIT PRS PART 1

5. FIRE FIGHTING MEASURES

Lower Explosive Limit:Ethyl acetate: 2.2; Ethanol: 3.3Upper Explosive Limit:Ethyl acetate: 11.0; Ethanol: 24.5

6. ACCIDENTAL RELEASE MEASURES

Spill Procedures: Eliminate all sources of ignition. Maintain good ventilation. Take up with an inert absorbent. Store in a

closed waste container until disposal.

7. HANDLING AND STORAGE

Storage: Store away from heat, sparks or open flame. Do not store at temperatures above 120 degrees F.

Handling: Avoid prolonged skin contact. Keep away from eyes. Do not inhale vapors.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Eyes: Safety glasses

Skin: Rubber or plastic gloves.

Ventilation: General; local exhaust ventilation as necessary to control any air contaminants to within their exposure

limits (or to the lowest feasible levels when limits have not been established) during the use of this

product.

Respiratory Protection: An approved respirator (i.e. NIOSH, etc.) should be worn when exposures are expected to exceed the

applicable limits.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:
Odor:
Boiling Point:
PH:
Solubility in Water:
Specific Gravity:
Copper colored
Alcohol
Not determined.
Does not apply
Partially
1.48

VOC Content(Wt.%): 50% by weight Vapor Pressure: Not Determined Vapor Density (Air=1): Heavier than air Evaporation Rate: Not Determined

10. STABILITY AND REACTIVITY

Chemical Stability:Stable at normal conditionsHazardous Polymerization:WILL NOT OCCUR.

Incompatabilities:Strong oxidizers, Strong alkalis, Peroxides, AcidsConditions to Avoid:Keep away from heat, sparks and open flame

Hazardous Products of Combustion: Oxides of carbon

11. TOXICOLOGICAL INFORMATION

See Section 3

12. ECOLOGICAL INFORMATION

No data available

13. DISPOSAL CONSIDERATIONS

Recommended Method of Disposal: Disposal should be made in accordance with federal, state and local regulations. **US EPA Waste Number:** Disposal should be made in accordance with federal, state and local regulations. D001 as per 40CFR 261.21, May be a TCLP waste per 40CFR 261.24/Silver

14. TRANSPORTATION INFORMATION

DOT (49CFR 172)

Domestic Ground Transport

DOT Shipping Name: Consumer Commodity (not more than one liter)

Hazard Class: ORM-D UN/ID Number: None Marine Pollutant: None

IATA

Product Name: 09117 REAR WINDOW DEFOGGER Item No: 390144B

REPAIR KIT PRS PART 1

Proper Shipping Name: Consumer Commodity (Not more than 1 liter)

Class or Division: Class 9 UN/NA Number: ID 8000

IMDG

Proper Shipping: Flammable liquids, n.o.s., (Ethyl acetate, ethyl alcohol), Limited Quantity

Hazard Class: Class 3, PG II
UN Number: UN 1993

15. REGULATORY INFORMATION

SARA 313 Chemicals: The following component(s) is listed as a SARA Section 313 Toxic Chemical.

SILVER

CALIFORNIA PROP 65:

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm

TSCA Inventory Status:

Listed on Inventory: YES All components of this product are listed (or exempt) on the EPA TSCA inventory.

16. OTHER INFORMATION

Estimated NFPA Rating: HEALTH 2, FLAMMABILITY 3, REACTIVITY 0.
Estimated HMIS Classification: HEALTH 2, FLAMMABILITY 3, PHYSICAL HAZARD 0

NFPA is a registered trademark of the National Fire Protection Assn. HMIS is a registered trademark of the National Paint and Coatings Assn.

Prepared By: Denise Boyd, Health and Safety Manager Revision Date: December/21/2007

Company: Permatex. Inc. 10 Columbus Blvd. Hartford, CT USA 06106 Revision 4

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Material Safety Data Sheet

1. PRODUCT IDENTIFICATION

Product Name: 09117 REAR WINDOW DEFOGGER REPAIR KIT PRS PART 2

Item No: 190510AA Product Type: Adhesive

2. COMPOSITION/INFORMATION ON INGREDIENTS					
Component	Weight%	ACGIH; TLV-TWA	OSHA PEL:		
POLYURETHANE METHACRYLATE RESIN MIXTURE	35-45	Not listed	Not Listed		
HYDROXYALKYL METHACRYLATE 27813-02-1	25-35	Not listed	Not Listed		
ALIPHATIC URETHANE METHACRYLATE 3290-92-4	<10	Not listed	Not Listed		
ACRYLIC ACID 79-10-7	<7	2 ppm	10 ppm TWA; 30 mg/m ³ TWA		
DIMETHYLBENZYL HYDROPEROXIDE 80-15-9	<3	Not listed	Not Listed		
2-HYDROXYETHYL METHACRYLATE 868-77-9	<3	Not listed	Not Listed		

3. HAZARDS IDENTIFICATION

Toxicity: May cause moderate skin irritation. Causes severe eye irritation. May cause nose, throat and respiratory

irritation.

Primary Routes of Entry:

Signs and Symptoms of Exposure:

Eye and skin contact, ingestion, inhalation

Repeated skin contact may cause allergic skin reactions May cause pain, redness or swelling of the eyes and excessive blinking and tear production Vapor is irritating to eyes and mucous membranes above TLV. Prolonged and repeated overexposure to vapors may produce symptoms of non-allergic asthma in sensitive individuals

Component	Weight%	NTP	ACGIH Carcinogens	IARC
ACRYLIC ACID	<7		A4 - Not Classifiable	Group 3 Monograph 71,
79-10-7			as a Human	1999; Supplement 7, 1987;
			Carcinogen	Monograph 19, 1979

Medical Conditions Recognized as Being Aggravated by Exposure:

Acrylic acid: Upper respiratory and lung diseases, dermatitis.

4. FIRST AID MEASURES

Ingestion: If swallowed, DO NOT induce vomiting. Keep individual calm. Obtain medical attention.

Inhalation: Move to fresh air in case of accidental inhalation of vapours. Oxygen or artificial respiration if needed.

Obtain medical attention.

Skin Contact: Remove contaminated clothing. Wash area with soap and water. If irritation persists, seek medical

attention.

Eye Contact: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical

attention if irritation persists.

5. FIRE FIGHTING MEASURES

Flash Point °F(C°): >200°F TCC

Recommended Extinguishing Media: Carbon Dioxide, Dry Chemicals, Foam.

Product Name: 09117 REAR WINDOW DEFOGGER <u>Item No:</u> 190510AA

REPAIR KIT PRS PART 2

5. FIRE FIGHTING MEASURES

Special Fire-Fighting Procedures: Firefighters should wear self-contained breathing apparatus.

Hazardous Products of Combustion: Oxides of carbon

Unusual Fire/Explosion Hazards: None

Lower Explosive Limit:2.0% Acrylic acidUpper Explosive Limit:8.0% Acrylic acid

6. ACCIDENTAL RELEASE MEASURES

Spill Procedures: Maintain good ventilation. Take up with an inert absorbent. Store in a closed waste container until

disposal.

7. HANDLING AND STORAGE

Storage: Store below 100 degrees F.

Handling: Do not inhale vapors. Avoid prolonged skin contact. Keep away from eyes.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Eyes: Safety glasses.

Skin: Neoprene or nitrile gloves recommended.

Ventilation: General; local exhaust ventilation as necessary to control any air contaminants to within their exposure

limits (or to the lowest feasible levels when limits have not been established) during the use of this

product.

Respiratory Protection: Not required under normal use. An approved organic vapor respirator should be worn when exposures are

expected to exceed the applicable limits.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:

Odor:
Boiling Point:
pH:
Does not apply
Solubility in Water:

Yellow liquid
Irritating
>300°F
Does not apply

Solubility in Water:

Specific Gravity:

VOC Content(Wt.%):

Vapor Pressure:

Vapor Density (Air=1):

Evaporation Rate:

Insoluble

1.08 @ 80°F

7.0% by weight

Not determined

Not Determined

10. STABILITY AND REACTIVITY

Chemical Stability:Stable at normal conditionsHazardous Polymerization:WILL NOT OCCUR.

Incompatabilities: Avoid contact with bases and strong oxidizers

Conditions to Avoid: Heat

Hazardous Products of Combustion: Oxides of carbon

11. TOXICOLOGICAL INFORMATION

See Section 3

12. ECOLOGICAL INFORMATION

No data available

13. DISPOSAL CONSIDERATIONS

Recommended Method of Disposal: Disposal should be made in accordance with federal, state and local regulations.

US EPA Waste Number: NH - Not a RCRA Hazardous Waste Material

14. TRANSPORTATION INFORMATION

DOT (49CFR 172)

Domestic Ground Transport

DOT Shipping Name: Unrestricted Hazard Class: None UN/ID Number: None

Product Name: 09117 REAR WINDOW DEFOGGER Item No: 190510AA

REPAIR KIT PRS PART 2

14. TRANSPORTATION INFORMATION

IATA

Proper Shipping Name: Unrestricted
Class or Division: None
UN/ID Number: None

IMDG

Proper Shipping: Unrestricted Hazard Class: None UN Number: None

Marine Pollutant: None

15. REGULATORY INFORMATION

SARA 313 Chemicals: The following component(s) is listed as a SARA Section 313 Toxic Chemical.

ACRYLIC ACID, DIMETHYLBENZYL HYDROPEROXIDE

CALIFORNIA PROP 65:

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

TSCA Inventory Status:

Listed on Inventory: YES All components of this product are listed (or exempt) on the EPA TSCA inventory.

16. OTHER INFORMATION

Estimated NFPA Rating: HEALTH 2, FLAMMABILITY 1, REACTIVITY 1.
Estimated HMIS Classification: HEALTH 2, FLAMMABILITY 1, PHYSICAL HAZARD 0

NFPA is a registered trademark of the National Fire Protection Assn. HMIS is a registered trademark of the National Paint and Coatings Assn.

Prepared By: Denise Boyd, Manager-Environmental, Health & Safety Revision Date: September/05/2008

Company: Permatex. Inc. 10 Columbus Blvd. Hartford, CT USA 06106 Revision

Number:

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Material Safety Data Sheet

1. PRODUCT IDENTIFICATION

Product Name: 09117 REAR WINDOW DEFOGGER REPAIR KIT PRS PART 3

Item No: PTX394319RR Product Type: Activator

2. COMPOSITION/INFORMATION ON INGREDIENTS				
Component	Weight%	ACGIH; TLV-TWA	OSHA PEL	
2-PROPANOL 67-63-0	90-100	200 ppm	400 ppm; 980 mg/m ³	
MINERAL SPIRITS 8052-41-3	<2	100 ppm	500 ppm; 2900 mg/m ³	
ORGANO-COPPER COMPOUND 85737-14-0	<1	Not listed	Not listed	
ORGANO-COPPER COMPOUND 68084-48-0	<1	Not listed	Not listed	
ORGANO-COPPER COMPOUND 22221-10-9	<1	Not listed	Not listed	

3. HAZARDS IDENTIFICATION

Toxicity: May cause eye, skin and respiratory irritation. Ingestion may irritate digestive tract and cause nausea,

vomiting and diarrhea. Prolonged exposure may cause liver and kidney effects and may affect the central

nervous system.

Primary Routes of Entry: Eye and skin contact, ingestion, inhalation

Signs and Symptoms of Exposure: Contact with eyes may cause tearing and redness. Excessive accidental exposure may cause headache,

dizziness, nausea and mild respiratory irritation. May cause skin irritation.

Component	Weight%	NTP	ACGIH Carcinogens	IARC
2-PROPANOL	90-100		A4 - Not classifiable	Group 3 Monograph 71, 1999;
67-63-0			as a human	Supp.7, 1987; Monograph 15,
			carcinogen	1977

Medical Conditions Recognized as Being Aggravated by Exposure:

May aggrevate preexisting dermatitis. Since this product contain copper compounds, individuals with Wilson's Disease should avoid exposure to this product.

4. FIRST AID MEASURES

Ingestion: Do not induce vomiting. Slowly dilute with 1-2 glasses of water or milk and seek medical attention. Never

give anything by mouth to an unconscious person.

Inhalation: Move to fresh air in case of accidental inhalation of vapours. Oxygen or artificial respiration if needed.

Obtain medical attention.

Skin Contact: Wash off with soap and water. If skin irritation persists, call a physician.

Eye Contact: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical

attention if irritation persists.

5. FIRE FIGHTING MEASURES

Flash Point °F(C°): >53°F TCC

Recommended Extinguishing Media: Carbon Dioxide, Dry Chemicals, Foam.

Special Fire-Fighting Procedures: Firefighters should wear self-contained breathing apparatus.

Hazardous Products of Combustion: Oxides of carbo

Unusual Fire/Explosion Hazards: Vapors may travel from container toward sources of ignition and flashback.

Irritating or toxic gases or fumes may be generated by thermal

decomposition or combustion.

Lower Explosive Limit: 2.0

Product Name: 09117 REAR WINDOW DEFOGGER Item No: PTX394319RR

REPAIR KIT PRS PART 3

5. FIRE FIGHTING MEASURES

Upper Explosive Limit: 12.0

ACCIDENTAL RELEASE MEASURES

Spill Procedures: Eliminate all sources of ignition. Maintain good ventilation. Take up with an inert absorbent. Store in a

closed waste container until disposal.

7. HANDLING AND STORAGE

Storage: Store away from heat, sparks or open flame. Do not store at temperatures above 100°F (38°C). Handling: Avoid contact with skin and eyes. Do not inhale vapors. Do not use near heat, sparks or open flame.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Safety glasses Eyes:

Neoprene or nitrile gloves recommended. Skin:

General; local exhaust ventilation as necessary to control any air contaminants to within their exposure Ventilation:

limits (or to the lowest feasible levels when limits have not been established) during the use of this product. **Respiratory Protection:**

An approved organic vapor respirator should be worn when exposures are expected to exceed the

applicable limits.

9. PHYSICAL AND CHEMICAL PROPERTIES

Green liquid Appearance: Odor: Alcoholic

Boiling Point: 180°F @ 760 mmHg Does not apply pH: 95-100% Solubility in Water: 0.79 @ 77°F

Specific Gravity: VOC(Wt.%): 97.6%

32 mm Hg @ 68°F **Vapor Pressure:** 2.1 (air = 1)Vapor Density (Air=1):

Evaporation Rate:

10. STABILITY AND REACTIVITY

Stable at normal conditions **Chemical Stability:**

Hazardous Polymerization: Will not occur. Strong oxidizers Incompatabilities:

Conditions to Avoid: Keep away from heat, sparks and open flame. - No smoking.

Oxides of carbon **Hazardous Products of Combustion:**

11. TOXICOLOGICAL INFORMATION

See Section 3

ECOLOGICAL INFORMATION

No data available

13. DISPOSAL CONSIDERATIONS

Recommended Method of Disposal: Disposal should be made in accordance with federal, state and local regulations.

US EPA Waste Number: D001 as per 40CFR 261.21

14. TRANSPORTATION INFORMATION

DOT (49CFR 172)

Ground Transport (DOT)

Consumer Commodity (not more than one liter) **DOT Shipping Name:**

ORM-D **Hazard Class:** None **UN/ID Number:**

IATA

Proper Shipping Name: Consumer Commodity (Not more than 1 liter)

Class 9 Class or Division: ID 8000 **UN/ID Number:**

Product Name: 09117 REAR WINDOW DEFOGGER Item No: PTX394319RR

REPAIR KIT PRS PART 3

IMDG

Proper Shipping: Isopropanol (Isopropyl Alcohol), Limited Quantity

Hazard Class: Class 3, PG II (12°C C.C)

UN Number: UN 1219

Marine Pollutant: None

15. REGULATORY INFORMATION

SARA 313 Chemicals: The following component(s) is listed as a SARA Section 313 Toxic Chemical.

COPPER COMPOUND

California Proposition 65: No California Prop 65 chemicals are known to be present.

TSCA Inventory Status: All components of this product are listed (or exempt) on the EPA TSCA inventory.

16. OTHER INFORMATION

Estimated NFPA Rating: HEALTH 1, FLAMMABILITY 3, REACTIVITY 1.
Estimated HMIS Classification: HEALTH 1, FLAMMABILITY 3, PHYSICAL HAZARD 0

NFPA is a registered trademark of the National Fire Protection Assn. HMIS is a registered trademark of the National Paint and Coatings Assn.

Prepared By: Denise Boyd, Manager-Environmental, Health & Safety Revision Date: June 17, 2009

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