

# SAFETY DATA SHEET

UPC 777 Perfect Patch Part A

SDS REVISION DATE: 05/05/2016

## SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** Perfect Patch Part A

**MANUFACTURER:** Universal Polymer Coatings, Inc.  
**DIVISION:** Floor Coating  
**ADDRESS:** 737 W. Taft Avenue, Orange CA 92865

**EMERGENCY PHONE:** 800-255-3924  
**CHEMTEL PHONE:** 800-255-3924  
**OTHER CALLS:** 714-279-1199  
**FAX PHONE:** 714-279-8070

**PRODUCT USE:** Floor Coating  
**PREPARED BY:** Universal Polymer Coatings, Inc.

## SECTION 2: HAZARDS IDENTIFICATIONS

### CLASSIFICATION OF THE SUBSTANCE OR MIXTURE:

GHS-US CLASSIFICATION

Acute Toxicity – Inhalation 4  
Eye Damage/Irritation 2B  
Skin Corr./Irritation 2  
Skin Sens. 1B  
Resp. Sens. 1  
Carc. 2  
STOT – Single Exp. – Resp. 3  
STOT – Repeated Exp. – Inhalation 2  
Aquatic Chronic 3  
Aquatic Acute 3

### LABEL ELEMENTS:

GHS LABEL ELEMENTS

HAZARD PICTOGRAMS:



**SIGNAL WORD:** Danger

### HAZARD STATEMENTS:

H320 Causes eye irritation  
H315 Causes skin irritation  
H332 Harmful if inhaled  
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled  
H317 May cause an allergic skin reaction  
H335 May cause respiratory irritation  
H351 Suspected of causing cancer  
H373 May cause damage to organs (Olfactory organs) through prolonged or repeated exposure (inhalation)  
H402 Harmful to aquatic life  
H412 Harmful to aquatic life with long lasting effects

### PRECAUTIONARY STATEMENTS:

**PREVENTION:** P280 Wash, thoroughly after handling...Wear protective gloves/protective clothing/eye protection/face protection  
P271 Use only outdoors or in a well-ventilated area  
P260 Do not breathe dust/fume/gas/mist/vapor/spray  
P201 Obtain special instructions before use.  
P261 Avoid breathing dust/fume/gas/mist/vapor spray  
P202 Do not handle until all safety precautions have been read and understood  
P284 Wear respiratory protection  
P272 Contaminated work clothing should not be allowed out of the workplace.  
P264 Wash thoroughly after handling.

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P273 Avoid release to the environment

**RESPONSE:** P312 Call a POISON CENTER or doctor/physician if you feel unwell.  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
P308+P311 If exposed: Call a POISON CENTER or doctor/physician  
P314 Get medical advice/attention if you feel unwell  
P302+P352 IF ON SKIN; wash with plenty of soap and water  
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.  
P362 Take off contaminated clothing and wash before reuse.  
P337+P313 If eye irritation persists: Get medical advice/attention.

**STORAGE:** P403+P233 Store in a well-ventilated place. Keep container tightly closed.  
P405 Store locked up

**DISPOSAL:** P501 Dispose of contents/container to hazardous or special waste collection point.

## OTHER HAZARDS:

None known

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENTS:	CAS #	AMOUNT
• P-MDI	9016-87-9	≥ 25 - < 50%
• Diphenylmethane-4,4'-diisocyanate (MDI)	101-68-8	≥ 25 - < 50%
• Propanoic acid, 2-methyl-2,2-dimethyl-1-(1methylethyl)-1,3-propanediyl ester	6846-50-0	≥10 - < 15%
• Methylenediphenyl diisocyanate	26447-40-5	≥ 1 - < 5%
• Isocyanic acid, polymethylenepolyphenylene ester, polymer with.alpha-hydro-omega-hydroxypoly (oxy-1,2-ethanediyl)	57636-09-6	≥ 1 - < 3%
• 1,3-Diazetidone-2,4-dione,1,3-bis[4-[(4-isocyanatophenyl)methyl]phenyl]-	17589-24-1	≥ 0.3 - < 1%

Any remaining components are trade secret.

## SECTION 4: FIRST AID MEASURES

**GENERAL ADVICE:** Remove contaminated clothing

**INHALATION:** Remove the affected individual into fresh air and keep the person calm. Assist in breathing if necessary. Immediate medical attention required.

**SKIN:** Wash affected areas thoroughly with soap and water. If irritation develops, seek medical attention

**EYES:** In case of contact with the eyes, rinse immediately for at least 15 minutes with plenty of water. Immediate medical attention required.

**INGESTION:** Rinse mouth and then drink plenty of water. Do not induce vomiting. Never induce vomiting or give anything by mouth if the victim is unconscious or having convulsions. Immediate medical attention required.

## MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED:

Symptoms: The most important known symptoms and effects are described in section 11, eye irritation, skin irritation, allergic symptoms  
Hazards: Symptoms can appear later.  
Information on: *Diphenylmethane-4,4'-diisocyanate (MDI)*

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*Hazards: Respiratory sensitization may result in allergic (asthma-like) signs in the lower respiratory tract including wheezing, shortness of breath and difficulty breathing, the onset of which may be delayed. Repeated inhalation of high concentrations may cause lung damage, including reduced lung function, which may be permanent. Substances eliciting lower respiratory tract irritation may worsen the asthma-like reactions that may be produced by product exposures.*

## NOTES TO PHYSICIANS/ SPECIAL TREATMENT:

Antidote: Specific antidotes or neutralizers to isocyanates do not exist.  
Treatment: Treatment should be supportive and based on the judgment of the physician in response to the reaction of the patient.

If seeking medical attention, provide SDS document to physician.

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## SECTION 5: FIRE-FIGHTING MEASURES

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**EXTINGUISHING MEDIA:** Water spray, dry powder, carbon dioxide, foam

**SPECIFIC (UNUSUAL) HAZARDS:** Hazards during fire-fighting: nitrous gases, fumes/smoke, isocyanates, vapor

**ADVICE FOR FIRE-FIGHTERS:** Firefighters should be equipped with self-contained breathing apparatus and turn-out gear.

Keep containers cool by spraying with water if exposed to fire. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

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## SECTION 6: ACCIDENTAL RELEASE MEASURES

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**PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES:** Clear area. Ensure adequate ventilation. Wear suitable personal protective clothing and equipment.

**ENVIRONMENTAL PRECAUTIONS:** Do not discharge into drains/surface waters/ groundwater.

**METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP:** For small amounts: Absorb isocyanates with suitable absorbent material (see § 40 CFR, sections 260, 264 and 265 for further information). Shovel into open container. Do not make container pressure tight. Move container to a well-ventilated area (outside). Spill area can be decontaminated with the following recommended decontamination solution: Mixture of 90% water, 8% concentrated ammonia, 2% detergent. Add at a 10 to 1 ration. Allow to stand for at least 48 hours to allow escape of evolved carbon dioxide.

For large amounts: if temporary control of isocyanates vapor is required, a blanket of protein foam or other suitable form (available from most fire departments) may be placed over the spill. Transfer as much liquid as possible via pump or vacuum device into closed but not sealed containers for disposal.

For residues: The following measures should be taken for final cleanup: wash down spill area with decontamination solution. Allow solution to stand for at least 10 minutes.

Dike spillage

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## SECTION 7: HANDLING AND STORAGE

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**PRECAUTIONS FOR SAFE HANDLING:** Provide suitable exhaust ventilation at the processing machines. Ensure thorough ventilation of stores and work areas. Avoid aerosol formation. When handling heated product, vapors of the product should be ventilated, and respiratory protection used. Wear respiratory protection when spraying. Danger of bursting when sealed gastight. Protect against moisture. If bulging of drum occurs, transfer to well ventilated area, puncture to relieve pressure, open vent and let stand for 48 hours before resealing.

Protection against fire and explosion: no explosion proofing necessary.

**CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES:** Keep away from water. Segregate from foods and animal feeds. Segregate from acids and bases.

Suitable materials for containers: carbon steel (iron), high density polyethylene (HDPE), low density polyethylene (LDPE), stainless steel 1.4301 (V2)

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Further information on storage conditions: Formation of CO<sub>2</sub> and build up of pressure possible. Keep container tightly closed and in a well-ventilated place. Outage of containers should be filled with dry inert gas at atmospheric pressure to avoid reaction with moisture.

Storage temperature: 80 - 95°F (27 - 35°C)

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### CONTROL PARAMETERS:

Chemical Name	ACGIH TLV	OSHA PEL
Diphenylmethane-4,4'-diisocyanate (MDI)	TWA value 0.005 ppm	CLV 0.02 ppm 0.2 mg/m <sup>3</sup> ; CLV 0.02 ppm 0.2 mg/m <sup>3</sup>
P-MDI	TWA value 0.005 ppm	CLV 0.02 ppm 0.2 mg/m <sup>3</sup> ; CLV 0.02 ppm 0.2 mg/m <sup>3</sup>

**ENGINEERING MEASURES:** Provide local exhaust ventilation to maintain recommended P.E.L.

### PERSONAL PROTECTION



**EYE PROTECTION:** Tight fitting safety goggles (chemical goggles). Wear face shield if splashing hazard exists.

**SKIN PROTECTION:** Cover as much of the exposed skin as possible to prevent all skin contact. Suitable materials may include, saran-coated material, depending upon conditions of use.

**HAND PROTECTION:** Chemical resistant protective gloves should be worn to prevent all skin contact. Suitable materials may include chloroprene rubber (neoprene), nitrile rubber (Buna N), chlorinated polyethylene, polyvinylchloride (Pylox), butyl rubber, depending upon conditions of use.

**RESPIRATORY PROTECTION:** When workers are facing concentrations above the occupational exposure limits they must use appropriate certified respirators. When atmospheric levels may exceed the occupational exposure limit (PEL or TLV) NIOSH-certified air-purifying respirators equipped with an organic vapor sorbent and particulate filter can be used as long as appropriate precautions and change out schedules are in place. For emergency or non-routine, high exposure situations, including confined space entry, use a NIOSH-certified full facepiece pressure demand self-contained breathing apparatus (SCBA) or a full facepiece pressure demand supplied-air respirator (SAR) with escape provisions.

**SPECIAL INSTRUCTIONS:** Wear protective clothing as necessary to prevent contact. Eye wash fountains and safety showers must be easily accessible. Observe the appropriate PEL or TLV value. Wash soiled clothing immediately. Contaminated equipment or clothing should be cleaned after each use or disposed of.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### APPEARANCE:

**Physical state** Liquid  
**Color** Dark brown

**ODOR:** Musty, slight odor

**ODOR THRESHOLD:** No data available

**pH:** No data available

**MELTING POINT:** No data available

**BOILING POINT:** 392°F (200°C) (5.000000 mm/Hg)

**FLASH POINT:** 390°F (198.90°C) (closed cup)

**EVAPORATION RATE:** Value can be approximated from Henry's Law Constant or vapor pressure

**FLAMMABILITY (solid, gas):** Not flammable

### FLAMMABILITY LIMIT IN AIR

**Upper:** For liquids not relevant for classification and labeling

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<b>Lower:</b>	For liquids not relevant for classification and labeling. The lower explosion point may be 41 - 59°F (5 - 15°C) below the flash point.
<b>VAPOR PRESSURE:</b>	0.01 mmHg @ 77°F (25°C)
<b>WATER SOLUBILITY:</b>	Reacts with water
<b>RELATIVE VAPOR DENSITY:</b>	No data available
<b>RELATIVE DENSITY:</b>	No data available
<b>PARTITION COEFFICIENT:</b>	No data available
<b>AUTO-IGNITION TEMP:</b>	>482°F (>250°C)
<b>DECOMP TEMP:</b>	No decomposition if stored and handled as prescribed/indicated
<b>VISCOSITY:</b>	200.000 mPa.s @ 77°F (25°C)
<b>MOLECULAR WEIGHT:</b>	No data available
<b>DENSITY:</b>	9.4400 lb/USg @ 77°F (25°C)

## SECTION 10: STABILITY AND REACTIVITY

<b>CHEMICAL STABILITY:</b>	Product is stable
<b>POSSIBILITY OF HAZARDOUS REACTIONS:</b>	Reacts with water, with formation of carbon dioxide. Risk of bursting. Reacts with alcohols. Reacts with acids. Reacts with alkalis. Reacts with amines. Risk of exothermic reaction. Risk of polymerization. Contact with certain rubbers and plastics can cause brittleness of the substance/product with subsequent loss in strength.
<b>CONDITIONS TO AVOID:</b>	Avoid moisture.
<b>MATERIAL TO AVOID:</b>	Acids, amines, alcohols, water, alkalines, strong bases, substances/products that react to isocyanates.
<b>HAZARDOUS DECOMPOSITION OR BY-PRODUCTS:</b>	Decomposition products: Hazardous decomposition products; carbon monoxide, carbon dioxide, nitrogen oxide, hydrogen cyanide, nitrogen oxides, aromatic isocyanates, gases/vapors.  Thermal decomposition: no decomposition if stored and handled as prescribed/indicated.

## SECTION 11: TOXICOLOGICAL INFORMATION

### INFORMATION ON TOXICOLOGICAL EFFECTS

#### LIKELY ROUTES OF EXPOSURE

Routes of entry for solids and liquids are ingestion and inhalation, but may include eye or skin contact. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquefied gases.

<b>Effects on Eye:</b>	No data available
<b>Effects of Skin:</b>	No data available
<b>Inhalation Effects:</b>	No data available
<b>Ingestion Effects:</b>	No data available
<b>Symptoms:</b>	No data available

#### ACUTE TOXICITY

**Acute Toxicity:** Assessment of acute toxicity: Inhalation of vapors may cause irritation of the mucous membranes of the nose, throat or trachea, breathlessness, chest discomfort, difficult breathing and reduced pulmonary function. Inhalation exposure well above the PEL may result additionally in eye irritation, headache, chemical bronchitis, asthma-like findings or pulmonary edema. Isocyanates have also been reported to cause hypersensitivity pneumonitis, which is characterized by flu-like symptoms, the onset of which may be delayed.

<b>Oral:</b>	Diphenylmethane-4,4'-diisocyanate (MD)	LD50: >2,000 mg/kg	Species: Rat
<b>Inhalation:</b>	Diphenylmethane-4,4'-diisocyanate (MD)	LC50: 2.0 mg/l	Species: Rat

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<b>Dermal:</b>	Diphenylmethane-4,4'-diisocyanate (MD)	LD50: >9,400 mg/kg	Species: Rabbit
<b>Skin corrosion/irritation:</b>	Assessment of irritating effects: Irritating to eyes, respiratory system and skin. Skin contact may result in dermatitis, either irritative or allergic.		
<b>Eye damage/irritation:</b>	Irritating		
<b>Sensitization to respiratory:</b>	Studies in animals suggest that dermal exposure may lead to pulmonary sensitization. However, the relevance of this result for humans is unclear.		
<b>Skin sensitisation:</b>	Can cause skin sensitization		
<b>Sensitization:</b>	Assessment of sensitization: Sensitization after skin contact possible. The substance may cause sensitization of the respiratory tract. As a result of previous repeated overexposures or a single large dose, certain individuals will develop isocyanates sensitization (chemical asthma) which will cause them to react to a late exposure to isocyanates at levels well below the PEL/TLV. These symptoms, which include chest tightness, wheezing, cough, shortness of breath, or asthmatic attack, could be immediate or delayed up to several hours after exposure. Similar to many non-specific asthmatic responses, there are reports that once sensitized an individual can experience these symptoms upon exposure to dust, cold air or other irritants. This increased lung sensitivity can persist for weeks and in severe cases for several years. Chronic overexposure to isocyanates has also been reported to cause lung damage, including a decrease in lung function, which may be permanent. Prolonged contact can cause reddening, swelling, rash, scaling, or blistering. In those who have developed a skin sensitization, these symptoms can develop as a result of contact with very small amounts of liquid material, or even as a result of vapor-only exposure. Animal tests indicate that skin contact may play a role in causing respiratory sensitization.		

## CHRONIC TOXICITY OR EFFECTS FROM LONG TERM EXPOSURES

<b>Carcinogenicity:</b>	A carcinogenic potential cannot be excluded after prolonged exposure to severely irritating concentrations. These effects are not relevant to humans at occupational levels of exposure.		
<b>Reproductive toxicity:</b>	Repeated inhalative uptake of the substance did not cause damage to the reproductive organs.		
<b>Germ cell mutagenicity:</b>	The substance was mutagenic in various bacterial test systems; however, these results could not be confirmed in tests with mammals.		
<b>Specific target organ systemic toxicity:</b>			
<b>Single exposure:</b>	Causes temporary irritation of the respiratory tract.		
<b>Repeated exposure:</b>	May cause damage to the olfactory epithelium after repeated inhalation. May cause damage to the lung after repeated inhalation. These effects are not relevant to humans at occupational levels of exposure.		
<b>Aspiration hazard:</b>	No data available		
<b>Symptoms of Exposure:</b>	The isocyanate component is a respiratory sensitizer. It may cause allergic reaction leading to asthma-like spasms of the bronchial tubes and difficulty in breathing. Medical supervision of all employees who handle or come into contact with isocyanates is recommended. Contact may aggravate pulmonary disorders. Persons with history of respiratory disease or hypersensitivity should not be exposed to this product. Pre-employment and periodic medical examinations with respiratory function tests (FEV <sub>1</sub> , FVC as a minimum) are suggested. Persons with asthmatic conditions, chronic bronchitis, other chronic respiratory diseases, recurrent eczema or pulmonary sensitization should be excluded from working with isocyanates. Once a person is diagnosed as having pulmonary sensitization (allergic asthma) to isocyanates, further exposure is not recommended.		

## SECTION 12: EGOLOGICAL INFORMATION

### ECOTOXICITY EFFECTS

<b>Aquatic toxicity:</b>			
Toxicity to Fish – Component(s):	Propanoic acid, 2-methyl-2,2-dimethyl-1-(1methylethyl)-1,3-propanediyl ester	LC50:>1.55 mg/l, 96h	Species: Pimephales promelas (fathead minnow)
Toxicity to Aquatic Invertebrate – Component(s):	Propanoic acid, 2-methyl-2,2-dimethyl-1-(1methylethyl)-1,3-propanediyl ester	EC50:>1.46 mg/l, 96h	Species: Daphnia magna (water flea)

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Toxicity to Aquatic Plants – Components(s): No data available

Toxicity to other organisms – Component(s): No data available

## PERSISTENCE AND DEGRADABILITY

**Biodegradability:** Poorly biodegradable. The product is unstable in water. The elimination data also refer to products of hydrolysis.

**Mobility in soil:** The substance will not evaporate into the atmosphere from the water surface. Absorption to solid soil phase is not expected.

**Bioaccumulation:** Significant accumulation in organisms is not to be expected.

## SECTION 13: DISPOSAL CONSIDERATIONS

**WASTE DISPOSAL METHOD:** Incinerate or dispose of in a licensed facility. Do not discharge substance/product into sewer system.

Steel drums must be emptied and can be sent to a licensed drum reconditioner for reuse, a scrap metal dealer or an approved landfill. Do not attempt to refill or clean containers since residue is difficult to remove. Under no circumstances should empty drums be burned or cut open with gas or electric torch as toxic decomposition products may be liberated. Do not reuse empty containers.

## SECTION 14: TRANSPORT INFORMATION

### U.S. DEPARTMENT OF TRANSPORTATION

**DOT:** Not classified

**IATA:** Not classified

**IMDG:** Not classified

**Further information:** DOT: This product is regulated if the amount in a single receptacle exceeds the Reportable Quantity (RQ). Please refer to Section 15 of this MSDS for the RQ for this product.

## SECTION 15: REGULATORY INFORMATION

### U.S. FEDERAL REGULATIONS

TSCA (TOXIC SUBSTANCE CONTROL ACT): None

EPA SARA Title III Section 311/312 (40 CFR 370) Hazard Classification: Acute; Chronic; Fire

EPA SARA Title III Section 313 (40 CFR 372) Component(s):

<u>CAS Number</u>	<u>Chemical name</u>
101-68-8	Diphenylmethane-4,4'-diisocyanate (MDI)
9016-87-9	P-MDI

US California Safe Drinking Water & Toxic Enforcement Act (Proposition 65): This product does not contain any chemicals known to State of California to cause cancer, birth defects or any other harm.

State Right-To-Know: Massachusetts, New Jersey, Pennsylvania

## SECTION 16: DISCLAIMER

### OTHER INFORMATION

HMIS Rating:

Health: 2

Flammability: 1

Physical Hazard: 1

NFPA Rating:

Health: 2

Fire: 1

Reactivity: 1

**DISCLAIMER:** The information herein is given in good faith, but no warranty expressed or implied is made. Universal Polymer Coatings, Inc. urges suppliers and users of this product to evaluate its suitability and compliance with local regulations as Universal Polymer Coatings, Inc. cannot foresee the nature of the final application or final location of usage.