

Vikon LLC

21 Wilbraham Street, Unit B11, Palmer, MA 01069
Phone (413) 284-0000 Fax (413) 284-0300

MATERIAL SAFETY DATA SHEET

Product: Vikon 8010R Aromatic Patch 'n Go (Side A)

Date: 10/26/09

Revision No: 2

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Vikon 8010R Aromatic Patch 'n Go "A"
MANUFACTURER: Vikon LLC
21 Wilbraham Street, Box B11
Building 35, 2nd Floor
Palmer, MA 01069
EMERGENCY PHONE: (413) 284-0000
FAX NUMBER: (413) 284-0300
CHEMICAL NAME: Blend of MDI Based Diisocyanate Prepolymers
CHEMICAL FAMILY: Aromatic Polyisocyanate
PRODUCT USE: Concrete Repair (mix with side B)

SECTION 2: COMPOSITION / INFORMATION ON INGREDIENTS

<u>INGREDIENT</u>	<u>CAS NO</u>	<u>%WT</u>	<u>SARA 313 REPORTABLE</u>
Diphenylmethane Diisocyanate	26447-40-5	30-70	None
Polyurethane Prepolymer of MDI and Polyol		30-70	None
Aromatic Petroleum 64742-94-5	64742-94-5	10-40	

	<u>ppm</u>	<u>mg/m3</u>
OSHA PEL-TWA:	N/E	N/E
OSHA PEL STEL:	N/E	N/E
OSHA PEL CEILING:	N/E	0.20
ACGIH TLV-TWA:	N/E	0.05 (8-hour, 40 hours/week)
ACGIH TLV STEL:	N/E	N/E
ACGIH TLV CEILING:	N/E	N/E

SECTION 2 NOTES: N/E= Not Established

SECTION 3: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: May cause eye, skin, and respiratory tract irritation. May cause allergic respiratory reaction. Harmful if inhaled. May cause allergic skin reaction.
May cause lung damage

ROUTES OF ENTRY: Inhalation; Skin Contact; Eye Contact

POTENTIAL HEALTH EFFECTS

EYES: Liquid, aerosol and vapors of this product may cause irritation

SKIN: May cause skin sensitization

INGESTION: None found

INHALATION: Can cause respiratory tract irritation. Certain individuals may develop isocyanate sensitization (asthma like symptoms).

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:

Asthma and other respiratory disorders (bronchitis, emphysema), skin allergies, eczema

CARCINOGENICITY: Not listed by NTP, IARC or regulated as a carcinogen by OSHA

SECTION 4: FIRST AID MEASURES

EYES: Flush with clean, lukewarm water for at least 15 minutes

SKIN: Remove contaminated clothing. Wash affected area with soap and water

INGESTION: Do not induce vomiting. Call physician immediately. Give 1 to 2 cups of milk or water to drink. Never give anything by mouth to an unconscious person.

INHALATION: Move to fresh air. Administer oxygen or artificial respiration as necessary.

NOTES TO PHYSICIANS OR FIRST AID PROVIDERS: Eyes: Stain for evidence of corneal injury. Workplace vapors could produce reversible corneal epithelial edema impairing vision. SKIN: Treat symptomatically for contact dermatitis. INGESTION: Treat symptomatically. There is no specific antidote. INHALATION: This product is known as a pulmonary sensitizer. An individual having a dermal or pulmonary reaction must be removed from further exposure.

SECTION 5: FIRE-FIGHTING MEASURES

FLAMMABLE LIMITS IN AIR, UPPER: N/E
(% BY VOLUME) LOWER: N/E

FLASH POINT:

F: >400

C: >204

METHOD USED: PMCC, ASTM 093

AUTOIGNITION TEMPERATURE:

F: >1100

C: >600

HMS HAZARD CLASSIFICATION

HEALTH: 2 FLAMMABILITY: 1 REACTIVITY: 1

PROTECTION:

EXTINGUISHING MEDIA: Dry Chemical; Carbon Dioxide; Foam; Water spray for large fires

SPECIAL FIRE FIGHTING PROCEDURES: Full emergency equipment with self-contained breathing apparatus and full protective clothing

UNUSUAL FIRE AND EXPLOSION HAZARDS: None reported

DECOMPOSITION PRODUCTS: CO₂, carbon monoxide, oxides of nitrogen, HCN, HDI and other undetermined aliphatic fragments

SECTION 6: ACCIDENTAL RELEASE MEASURES

ACCIDENTAL RELEASE MEASURES: SPILL or LEAK: Evacuate nonessential personnel. Remove all sources of ignition and ventilate the area. Notify appropriate authorities if necessary. Dike or impound the spilled material and control further spillage if possible. Cover the spill with sawdust, vermiculite, Fuller's earth or other absorbent material. Pour decontamination solution over spill area and allow to react for 10 minutes. Collect material in open containers and add further decontamination solution.

Decontamination solution: Surfactant Union Carbide Tergitol TMN-10(20%) and water (80%)

SECTION 7: HANDLING AND STORAGE

STORAGE TEMPERATURE: 50 deg F / 100 deg F

SHELF LIFE: 6 months at 77 deg F after receipt of material by customer

OTHER PRECAUTIONS: Storage at temperatures greater than 122 deg F can result in an increase in monomeric HDI content. Store in tightly closed containers to prevent moisture contamination. Nitrogen blanketing of material is recommended.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

RESPIRATORY PROTECTION: A respirator that is recommended or approved for use in isocyanate-containing environments is necessary for spray applications.

EYE PROTECTION: Safety glasses, goggles or faceshield

SKIN PROTECTION: Butyl rubber, nitrile rubber, polyvinyl alcohol gloves. Cover as much exposed skin as possible. Tyvek (or like) suit with headcover is recommended for spray applications.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Safety showers and eyewash stations should be available

WORK HYGIENIC PRACTICES: Educate and train all employees in the safe use of product.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Brown liquid

ODOR: Musty

PHYSICAL STATE: Liquid

pH AS SUPPLIED: N/E

BOILING POINT: 410F, 210C

MELTING POINT: N/E

FREEZING POINT: F: -74F
C: -59C

VAPOR PRESSURE (mmHg): <math><1.0 \times 10^{-5}</math> @ 20 C

SPECIFIC GRAVITY (H₂O = 1): 1.14 @ 68 F

EVAPORATION RATE: N/E

SOLUBILITY IN WATER: Insoluble

PERCENT SOLIDS BY WEIGHT: 100

VISCOSITY: 600 cps @ 25 C

SECTION 10: STABILITY AND REACTIVITY

STABILITY: Stable under normal conditions

INCOMPATIBILITY (MATERIALS TO AVOID): Water, amines, strong bases, alcohols

DECOMPOSITION OR BY-PRODUCTS: CO₂, CO HCN and other aromatic fragments

HAZARDOUS POLYMERIZATION: May occur; Contact with moisture or other materials which react with isocyanates or temperatures above 400 F

SECTION 11: TOXICOLOGICAL INFORMATION

ACUTE TOXICITY:

ORAL LD50 greater than 10000 mg/kg(rats)

DERMAL LD50 greater than 5000 mg/kg(rabbits)

INHALATION LC50 lower respiratory irritant

EYE EFFECTS Severe irritant capable of corneal injury

SKIN EFFECTS Moderate irritant

OTHER ACUTE EFFECTS Ames Test —Negative

SECTION 12: ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION: None available

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: Waste must be disposed of in accordance with federal state and local environmental control regulations. Incineration is the preferred method.
RCRA HAZARD CLASS: If discarded in its purchased form, this product would not be a hazardous waste either by listing or characteristic

SECTION 14: TRANSPORT INFORMATION

U.S. DEPARTMENT OF TRANSPORTATION (DOMESTIC SURFACE)
PROPER SHIPPING NAME...Other Regulated Substances, Liquid, N.O.S. *see note below
HAZARD CLASS 9
UN NUMBER UN 3082
PACKING GROUP III
HAZARDOUS SUBSTANCE Methylene bisphenyl isocyanate
DOT PRODUCT RQ lbs 8,333 lbs
FREIGHT CLASS BULK Isocyanate
FREIGHT CLASS PACKAGE Chemicals, NOI (Isocyanate)

* When in individual containers of less than the product RQ, this material ships as non-regulated

WATER TRANSPORTATION: IMO/IMDG CODE
HAZARD CLASS: Not Regulated
AIR TRANSPORTATION: ICAO/IATA
HAZARD CLASS: Not Regulated

SECTION 15: REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS
TSCA (TOXIC SUBSTANCE CONTROL ACT): On Inventory
CERCLA (COMPREHENSIVE RESPONSE COMPENSATION, AND LIABILITY ACT): Reportable quantity
100 lbs
SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT):
3111312 HAZARD CATEGORIES: Immediate Health Hazard; Delayed Health Hazard; Reactive Hazard
313 REPORTABLE INGREDIENTS: None

SECTION 16: OTHER INFORMATION

Disclaimer: The information and recommendations contained herein are based on standard product and are proprietary and furnished solely for the use of our customers. While believed to be true and accurate, they are offered solely for your consideration, investigation, and verification, and no guarantee or warranty of any kind, expressed or implied, is made by Creative Material Technologies, Ltd. with respect to this data. The applicability of federal, state and local laws and regulations to this product information must be determined by the user.

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MATERIAL SAFETY DATA SHEET

Product: Vikon 8010R Aromatic Patch 'n Go (Side B)

Date: 10/26/09

Revision No: 2

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Vikon 8010R Aromatic Patch 'n Go "B" (all colors)
MANUFACTURER: Vikon LLC
21 Wilbraham Street, Box B11
Building 35, 2nd Floor
Palmer, MA 01069
EMERGENCY PHONE: (413) 284-0000
FAX NUMBER: (413) 284-0300
CHEMICAL FAMILY: Blend of Polyols
PRODUCT USE: Concrete Repair (mix with side A)

SECTION 2: COMPOSITION / INFORMATION ON INGREDIENTS

<u>INGREDIENT</u>	<u>CAS NO</u>	<u>%WT</u>	<u>SARA 313 REPORTABLE</u>
Polyether Polyol	25723-16-4	40-50	None
Polyester Polyol		40-50	None
Aromatic Petroleum	64742-94-5	10-40	
Pigment		5-10	

	<u>ppm</u>	<u>mg/m3</u>
OSHA PEL-TWA:	N/E	N/E
OSHA PEL STEL :	N/E	N/E
OSHA PEL CEILING:	N/E	N/E
ACGIH TLV-TWA:	N/E	N/E
ACGIH TLV STEL:	N/E	N/E
ACGIH TLV CEILING:	N/E	N/E

SECTION 2 NOTES: N/E= Not Established

SECTION 3: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: Causes skin/eye burns or severe irritation. Harmful if swallowed. Repeated or prolonged exposure may irritate the respiratory system. The product is combustible and toxic vapors may be given off in a fire.

ROUTES OF ENTRY: Contact with skin, eyes and inhalation of product vapor. Product ingestion is unlikely to occur if proper safety/hygiene procedures are followed.

POTENTIAL HEALTH EFFECTS

EYES: Aerosol and vapors may cause irritation

SKIN: May cause irritation

INGESTION: May be harmful if swallowed

INHALATION: Inhalation of product vapors may cause irritation of the respiratory system

ACUTE HEALTH HAZARDS: EYES: Causes irritation.

INHALATION: Vapors in high concentrations may cause irritation of nose and throat, headache and nausea.

CHRONIC HEALTH HAZARDS: No documented effects in humans as a result of chronic exposure

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: No evidence of aggravation of existing medical conditions

CARCINOGENICITY:

OSHA: ACGIH: NTP: IARC:

OTHER: None

SECTION 4: FIRST AID MEASURES

EYES: Flush immediately with plenty of water for at least 15 minutes. Contact a physician.

SKIN: Take off all contaminated clothing. Wash exposed areas with lots of soap and water.

INGESTION: Do not induce vomiting. Call a physician if symptoms arise

INHALATION: Remove victim to fresh air.

NOTES TO PHYSICIANS OR FIRST AID PROVIDERS: Symptomatic treatment is advised. In the unlikely event that large quantities of the product are ingested, gastric lavage should be considered. An activated charcoal slurry taken within 30 minutes may reduce the toxicity of the chemical. A 5:1 ratio of charcoal to the material ingested is the recommended dosage. Activated charcoal should not be considered an antidote.

SECTION 5: FIRE-FIGHTING MEASURES

FLASH POINT:

C: 234 deg

NFPA HAZARD CLASSIFICATION

HEALTH: 2 FLAMMABILITY: 1 REACTIVITY: 1

HMIS HAZARD CLASSIFICATION

HEALTH: 2 FLAMMABILITY: 1 REACTIVITY: 1

PROTECTION:

EXTINGUISHING MEDIA: Water spray, dry chemical or carbon dioxide

SPECIAL FIRE FIGHTING PROCEDURES: Do not use a solid water stream

UNUSUAL FIRE AND EXPLOSION HAZARDS: Cool containers / tanks with water spray

HAZARDOUS DECOMPOSITION PRODUCTS: Ammonia, CO,CO2, nitrogen oxides

SECTION 6: ACCIDENTAL RELEASE MEASURES

ACCIDENTAL RELEASE MEASURES: Prevent product from entering drains, sewers and waterways. Use absorbent materials (sand, sawdust, vermiculite) to contain spills. Avoid contact with skin, eyes and clothing.

SECTION 7: HANDLING AND STORAGE

HANDLING AND STORAGE: Use only in well ventilated areas. Wear personal protective equipment. Keep containers tightly closed in a cool place away from heat and sources of ignition

OTHER PRECAUTIONS: Eye wash and safety shower should be available nearby when this material is handled or used.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

VENTILATION: Local exhaust ventilation is recommended if generating vapor or mist.

RESPIRATORY PROTECTION: Use approved respirator

EYE PROTECTION: Chemical goggles with face shield is recommended

SKIN PROTECTION: Wash exposed skin several times per day. Solvent resistant gloves and protective suits are recommended

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Clear or Colored liquid

ODOR: Slight Amine

PHYSICAL STATE: Liquid

pH AS SUPPLIED: Not Determined

BOILING POINT: >250C

MELTING POINT: N/E

FREEZING POINT: N/E

VAPOR PRESSURE (mmHg): <1 @ 68 F, 20 C

VAPOR DENSITY (AIR = 1): >1

SPECIFIC GRAVITY (H₂O = 1): 1.088

SOLUBILITY IN WATER: N/E

PERCENT SOLIDS BY WEIGHT: 100

VOLATILE ORGANIC COMPOUNDS (VOC): <1% by ASTM D 2369

SECTION 10: STABILITY AND REACTIVITY

STABILITY: Stable under normal conditions

CONDITIONS TO AVOID (STABILITY): High heat

INCOMPATIBILITY (MATERIAL TO AVOID): Acids, Oxidizing and reducing agents

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS:

HAZARDOUS POLYMERIZATION: Will not occur

SECTION 11: TOXICOLOGICAL INFORMATION

ORAL LD50 N/A

DERMAL LD50 N/A

SECTION 12: ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION: Very toxic to aquatic organisms. May cause long term adverse effects in the aquatic environment

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: Can be incinerated when in compliance with local regulations. Otherwise dispose of in compliance with all applicable regulations.

RCRA HAZARD CLASS: This product does not meet the criteria of a hazardous waste if discarded in its purchased form

SECTION 14: TRANSPORT INFORMATION

U.S. DEPARTMENT OF TRANSPORTATION
PROPER SHIPPING NAME: Not Regulated
PACKING GROUP:
LABEL STATEMENT:

AIR TRANSPORTATION: ICAO/ IATA
PROPER SHIPPING NAME: Not Regulated
HAZARD CLASS :
UN NUMBER:
PACKING GROUP:
LABEL STATEMENTS:

SECTION 15: REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS
TSCA (TOXIC SUBSTANCE CONTROL ACT): Listed
CERCLA (COMPREHENSIVE RESPONSE COMPENSATION, AND LIABILITY ACT): None
SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT): This product does not contain a toxic chemical for routine annual toxic chemical release reporting under sec. 313 (40 CFR 372)
311/312 HAZARD CATEGORIES: None
313 REPORTABLE INGREDIENTS: None

SECTION 16: OTHER INFORMATION

Disclaimer: The information and recommendations contained herein are based on standard product and are proprietary and furnished solely for the use of our customers. While believed to be true and accurate, they are offered solely for your consideration, investigation, and verification, and no guarantee or warranty of any kind, expressed or implied, is made by Creative Material Technologies, Ltd. with respect to this data. The applicability of federal, state and local laws and regulations to this product information must be determined by the user.