

**Section 1: Product and Company Identification**

**Polymerica, Inc.**  
 3821 Collins Lane  
 Louisville, KY 40245  
 Business: 502-326-3670  
 FAX: 502-326-3632

**Product Name:** Universal Surfacers – Part A  
**Generic Name:**  
**Synonyms:** NA  
**Product Description:** Reactive resin-forming component  
**CAS #** NA – mixture  
**Date of Revision:** 3 June 2009

**24-Hour Emergency Phone Number: (800) 535-5053 (INFOTRAC) U.S. & Canada**  
**International calls: (352) 323-3500**  
**Use only for spills and releases.**

**Section 2: Hazard Identification**

Viscous liquid. **Emergency Overview:** May irritate eyes and skin. May be harmful if ingested, inhaled or absorbed through skin. Use with adequate ventilation.

|                            |          |
|----------------------------|----------|
| <b>HMI S HEALTH</b>        | <b>1</b> |
| <b>HMI S FLAMMABILITY</b>  | <b>1</b> |
| <b>HMI S REACTIVITY</b>    | <b>0</b> |
| <b>PERSONAL PROTECTION</b> | <b>E</b> |

**OSHA Regulatory Status:** This material is considered hazardous under the OSHA standard.

**WHMIS Classification:** D2B

**Potential Health Effects:**

**Inhalation:** Low vapor pressure makes this route unlikely unless misting of the liquid occurs. At higher temperatures fumes may cause irritation.

**Ingestion:** Low order of toxicity

**Skin Contact:** May cause irritation. May cause sensitization in susceptible persons.

**Eye Contact:** Can causes irritation, redness and tearing.

**Chronic Exposure:** No information found.

**Aggravation of Pre-existing Conditions:** No information found.

**Target Organs:** Eyes, skin

**Section 3: Composition / Information On Ingredients**

| Component              | Common Names, Synonyms                                   | CAS #     | EINECS    | Weight % |
|------------------------|--|-----------|-----------|----------|
| Pine oil               |  | 8002-09-3 | 304-455-9 | < 10     |
| Castor oil             |  | 8001-79-4 | 222-293-8 | 40 – 50  |
| Benzyl butyl phthalate | 1,2-benzenedicarboxylic acid<br>butyl phenylmethyl ester | 85-68-7   | 201-622-7 | 15 – 30  |

**Non-hazardous components may or may not be listed. Carcinogens are listed when present at 0.1% or more; components which are otherwise hazardous according to OSHA are listed when present at 1.0% or more. This is not intended to be complete compositional disclosure. See Section 15 for applicable states right to know and other regulatory information.**

**Section 4: First Aid Measures**

**Inhalation:** Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

**Ingestion:** DO NOT induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention immediately.

**Skin:** Immediately flush skin with plenty of water for at least 15 minutes. Get medical attention if irritation develops.

**Eyes:** Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

**Note to Physicians:** N/A

### Section 5: Fire Fighting Measures

**Fire:** Flash point: > 200°C (> 392°F), closed cup

**Explosion:** Not considered an explosion hazard.

**Extinguishing Media:** Water spray, dry chemical, alcohol foam or carbon dioxide. Water spray may be used to keep fire exposed containers cool.

**Special Precautions:** In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

**NFPA Rating:** Health - 1      Flammability - 1      Reactivity - 0      Other – NA

### Section 6: Accidental Release Measures

Ventilate area of leak or spill. Remove all sources of ignition. Wear appropriate personal protective equipment as specified in Section 8. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Contain and recover liquid when possible. Use non-sparking tools and equipment. Collect liquid in an appropriate container or absorb with an inert material (e. g., vermiculite, dry sand, earth), and place in a chemical waste container. Do not use combustible materials, such as saw dust. Do not flush to sewer! If a leak or spill has not ignited, use water spray to disperse the vapors, to protect personnel attempting to stop leak, and to flush spills away from exposures. US Regulations (CERCLA) require reporting spills and releases to soil, water and air in excess of reportable quantities. The toll free number for the US Coast Guard National Response Center is (800) 424-8802.

### Section 7: Handling and Storage

Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage. Isolate from any source of heat or ignition. Separate from incompatibles, combustibles, organic or other readily oxidizable materials. Containers of this material may be hazardous when empty since they retain product residues (liquid, vapors); observe all warnings and precautions listed for the product.

### Section 8: Exposure Control / Personal Protection

#### Exposure Guidelines:

| Component              | CAS #     | OSHA PEL         | ACGIH TLV        | NIOSH TLV        |
|------------------------|-----------|------------------|------------------|------------------|
| Pine oil               | 8002-09-3 | None established | None established | None established |
| Castor oil             | 8001-79-4 | None established | None established | None established |
| Benzyl butyl phthalate | 85-68-7   | None established | None established | None established |

#### Personal Protective Equipment:

**Skin Contact:** Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact. Nitrile and NBR gloves are recommended.

**Eye Contact:** Use chemical safety goggles and/or full face shield where misting or splashing of solutions is possible. Maintain eye wash fountain and quick-drench facilities in work area.

**Inhalation:** Use NIOSH-approved vapor respirator if exposure is unknown or exceeds permissible limits. A respiratory protection program that meets OSHA's 29 CFR 1910.134 or ANSI Z88.2 requirements must be followed whenever workplace conditions warrant respirator use. **WARNING:** Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.

**Engineering Controls:** A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, *Industrial Ventilation, A Manual of Recommended Practices*, most recent edition, for details.

### Section 9: Physical and Chemical Properties

|                  |                   |                         |          |
|------------------|-------------------|-------------------------|----------|
| Appearance       | Viscous liquid    | Specific Gravity (g/mL) | 1.111    |
| Odor             | Negligible        | pH                      | N/A      |
| Odor Threshold   | ND                | Solubility in water     | Very low |
| Melting Point    | ND                | % Volatiles             | <4%      |
| Boiling Point    | > 200°C (> 392°F) | Evaporation Rate        | ND       |
| Flash Point      | > 200°C (> 392°F) | Vapor Pressure          | ND       |
| VOC as component | 0 g/L             | VOC as applied          | 0 g/L    |

**Section 10: Stability and Reactivity**

**Chemical Stability:** This product is stable in closed containers at room temperature.

**Hazardous Decomposition Products:** Carbon oxides (CO, CO<sub>2</sub>), organic acids and aldehydes

**Hazardous Polymerization:** Will not occur.

**Incompatibilities:** Strong oxidizers, acids, sparks, flame, heat

**Conditions to Avoid:** Incompatible materials, combustible materials.

**Section 11: Toxicological Information**

**Acute Dose Effects: Eyes:** No information found.

**Skin:** Pine oil: Rabbit LD50 = 5000 mg/kg

**Oral:** Benzyl butyl phthalate: Mouse LD50: 4170 mg/kg; Rat LD50 = 2330 mg/kg; Pine oil: Rat LD50 = 3200 mg/kg

**Inhalation:** No information found.

**Section 12: Ecological Information**

**Environmental Fate:** This product is not expected to bioaccumulate. This product is not readily biodegradable.

**Ecotoxicity:** No information found.

**Section 13: Disposal Considerations**

**As a waste, this material in its raw form IS NOT considered a HAZARDOUS WASTE under RCRA (29 CFR 261).**

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

**Section 14: Transport Information**

**U.S. Domestic Ground** **Proper Shipping Name:** Not regulated for transport

**DOT Hazard Class:** N/A

**UN Number:** N/A

**Packing Group:** N/A

**U.S. Domestic Air** **Proper Shipping Name:** Not regulated for transport

**DOT Hazard Class:** N/A

**UN Number:** N/A

**Packing Group:** N/A

**Canadian TDG** **Proper Shipping Name:** Not regulated for transport

**DOT Hazard Class:** N/A

**UN Number:** N/A

**Packing Group:** N/A

**International Air** **Proper Shipping Name:** Not regulated for transport

**DOT Hazard Class:** N/A

**UN Number:** N/A

**Packing Group:** N/A

**CERCLA Reportable Quantity (RQ):** N/A

Releases exceeding the reportable quantity (RQ) must be reported to the National Response Center (800) 424-8802.

**This data provided for information only. The description shown may not apply to all shipping situations.**

**Consult 49 CFR, or appropriate regulations to properly classify your shipment for transportation.**

**Section 15: Regulatory Information**

**TSCA Chemical Inventory:** All of the chemicals in this product are listed on the TSCA Inventory.

**TSCA Sec 4 Chemical Test Rule:** None of the chemicals in this product are under a Chemical Test Rule.

**TSCA Sec 8(d):** None of the chemicals in this product are on the Health and Safety Reporting List.

**TSCA Sec 12(b) Notices of Export:** None of the chemicals in this product are on this list.

**TSCA Significant New Use Rule (SNUR):** None of the chemicals in this product are on this list.

**SARA Sec 302 (EHS) TPQ:** None of the chemicals in this product have a TPQ.

**SARA Sec 302 (EHS) RQ:** None of the chemicals in this product have a RQ.

**SARA Sec 311/312:** Acute – YES; Chronic – YES; Fire – NO; Release of Pressure – NO; Reactivity – NO

**SARA 313 List:** None of the chemicals in this product is reportable under Section 313 Title III and 40 CFR Part 372.

**CERCLA Hazardous Substances and corresponding RQs:** Benzyl butyl phthalate: 100 lbs, this product 500 lbs.

**RCRA:** None of the chemicals in this product are on this list.

**Clean Air Act: Hazardous Air Pollutants? NO Class 1 Ozone Depletors? NO Class 2 Ozone Depletors? NO**

**Clean Water Act: Hazardous Substance? NO Priority Pollutant? NO Toxic Pollutant? NO**

**Chemical Weapons Convention:** None of the chemicals in this product are on this list.

**Drug Enforcement Agency (DEA) CDTA:** None of the chemicals in this product are on this list.

**OSHA:** None of the chemicals in this product are considered Highly Hazardous by OSHA.

**State Right-to-Know Lists:** Benzyl butyl phthalate is found on the Right-to-Know lists of New Jersey, Pennsylvania and Massachusetts.

**California Proposition 65:** This product contains Benzyl butyl phthalate, a chemical known to the State of California to cause reproductive toxicity.

**Canadian:** This product has been classified in accordance with the hazard criteria of the *Controlled Products Regulations* and the MSDS contains all of the information required by the *Controlled Products Regulations*.

The components in this product are listed, or exempt from listing, on the Canadian Domestic Substances List.

**WHMIS Classification:** D2B

**Ingredient Disclosure List:** Castor oil and Benzyl butyl phthalate are listed on the Canadian Ingredient Disclosure List.

#### Section 16: Other Information

See Section 16 at very end of this document. All notes and claims that would appear in this section are found there.

### Section 1: Product and Company Identification

**Polymerica, Inc.**  
3821 Collins Lane  
Louisville, KY 40245  
Business: 502-326-3670  
FAX: 502-326-3632

**Product Name:** Universal Surfacer – Part B  
**Generic Name:**  
**Synonyms:** NA  
**Product Description:** Reactive resin-forming component  
**CAS #** NA – mixture  
**Date of Revision:** 3 June 2009

**24-Hour Emergency Phone Number: (800) 535-5053 (INFOTRAC) U.S. & Canada**  
**International calls: (352) 323-3500**  
**Use only for spills and releases.**

### Section 2: Hazard Identification

Colorless to yellow liquid. **Emergency Overview:** May irritate eyes, skin and respiratory tract. May be harmful if ingested, inhaled or absorbed through skin. Use with adequate ventilation.

|                            |          |
|----------------------------|----------|
| <b>HMIS HEALTH</b>         | <b>2</b> |
| <b>HMIS FLAMMABILITY</b>   | <b>1</b> |
| <b>HMIS REACTIVITY</b>     | <b>1</b> |
| <b>PERSONAL PROTECTION</b> | <b>E</b> |

**OSHA Regulatory Status:** This material is considered hazardous under the OSHA standard.

**WHMIS Classification:** B3, D2B

**WHMIS Controlled**

#### Potential Health Effects:

**Inhalation:** Causes irritation to the respiratory tract. Symptoms may include coughing, shortness of breath.

**Ingestion:** May cause irritation to the gastrointestinal tract, with symptoms of pain, nausea, vomiting and diarrhea.

**Skin Contact:** Causes skin irritation with symptoms of redness and swelling. Cured material can be difficult to remove. May cause skin sensitization.

**Eye Contact:** May cause irritation, redness, pain, and corneal damage. Vapors can cause tearing and burning.

**Chronic Exposure:** No information found.

**Aggravation of Pre-existing Conditions:** No information found.

**Target Organs:** Eyes, upper respiratory tract, skin.

### Section 3: Composition / Information On Ingredients

| Component                                   | Common Names, Synonyms       | CAS #      | EINECS    | Weight % |
|---|------------------------------|------------|-----------|----------|
| Polymeric diphenylmethane diisocyanate      |                              | 9016-87-9  | polymer   | 35 – 45  |
| 4,4' Diphenylmethane diisocyanate           | MDI                          | 101-68-8   | 202-966-0 | 20 – 30  |
| Diphenylmethane diisocyanate, mixed isomers | Diphenylmethane diisocyanate | 26447-40-5 | 247-714-0 | 25 – 35  |

**Non-hazardous components may or may not be listed. Carcinogens are listed when present at 0.1% or more; components which are otherwise hazardous according to OSHA are listed when present at 1.0% or more. This is not intended to be complete compositional disclosure. See Section 15 for applicable states right to know and other regulatory information.**

### Section 4: First Aid Measures

**Inhalation:** Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

**Ingestion:** DO NOT induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention immediately.

**Skin:** Immediately flush skin with plenty of water for at least 15 minutes. Get medical attention if irritation develops.

**Eyes:** Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

**Note to Physicians:** N/A

### Section 5: Fire Fighting Measures

**Fire:** Flash point: > 202°C (406°F) Closed cup

**Explosion:** Not considered an explosion hazard.

**Extinguishing Media:** Dry chemical, alcohol foam or carbon dioxide. Product reacts slowly with water to form carbon dioxide. Water spray may be used to keep fire exposed containers cool.

**Special Precautions:** In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

**NFPA Rating:** Health - 2      Flammability - 1      Reactivity - 1      Other – NA

### Section 6: Accidental Release Measures

Ventilate area of leak or spill. Remove all sources of ignition. Wear appropriate personal protective equipment as specified in Section 8. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Contain and recover liquid when possible. Use non-sparking tools and equipment. Collect liquid in an appropriate container or absorb with an inert material (e. g., vermiculite, dry sand, earth), and place in a chemical waste container. Do not use combustible materials, such as saw dust. Do not flush to sewer! If a leak or spill has not ignited, use water spray to disperse the vapors, to protect personnel attempting to stop leak, and to flush spills away from exposures. US Regulations (CERCLA) require reporting spills and releases to soil, water and air in excess of reportable quantities. The toll free number for the US Coast Guard National Response Center is (800) 424-8802.

### Section 7: Handling and Storage

Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage. Isolate from any source of heat or ignition. Separate from incompatibles, combustibles, organic or other readily oxidizable materials. Containers of this material may be hazardous when empty since they retain product residues (liquid, vapors); observe all warnings and precautions listed for the product.

### Section 8: Exposure Control / Personal Protection

**Exposure Guidelines:**

| Component  | CAS #      | OSHA PEL                                   | ACGIH TLV        | NIOSH TLV        |
|--|------------|--|------------------|------------------|
| Polymeric diphenylmethane diisocyanate           | 9016-87-9  | None established                           | None established | None established |
| 4,4' Diphenylmethane diisocyanate                | 101-68-8   | 0.02 ppm, 0.2 mg/m <sup>3</sup><br>Ceiling | 0.005 ppm TWA    | None established |
| 4,4' Diphenylmethane diisocyanate, mixed isomers | 26447-40-5 | None established                           | None established | None established |

**Personal Protective Equipment:**

**Skin Contact:** Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact. PVA-coated and nitrile gloves are recommended.

**Eye Contact:** Use chemical safety goggles and/or full face shield where misting or splashing of solutions is possible. Maintain eye wash fountain and quick-drench facilities in work area.

**Inhalation:** Use NIOSH-approved vapor respirator if exposure is unknown or exceeds permissible limits. A respiratory protection program that meets OSHA's 29 CFR 1910.134 or ANSI Z88.2 requirements must be followed whenever workplace conditions warrant respirator use. **WARNING:** Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.

**Engineering Controls:** A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, *Industrial Ventilation, A Manual of Recommended Practices*, most recent edition, for details.

| Section 9: Physical and Chemical Properties |                            |                         |           |
|---|----------------------------|-------------------------|-----------|
| Appearance                                  | Colorless to yellow liquid | Specific Gravity (g/mL) | 1.23      |
| Odor  | Musty                      | pH                      | N/A       |
| Odor Threshold                              | ND                         | Solubility in water     | Nil       |
| Melting Point                               | ND                         | % Volatiles             | < 1%      |
| Boiling Point                               | > 208°C (> 406 °F)         | Evaporation Rate        | ND        |
| Flash Point                                 | > 202°C (396°F)            | Vapor Pressure          | ND        |
| VOC as component                            | 0 lbs/gal                  | VOC as applied          | 0 lbs/gal |

### Section 10: Stability and Reactivity

**Chemical Stability:** This product is stable in closed containers at room temperature.

**Hazardous Decomposition Products:** Carbon oxides (CO, CO<sub>2</sub>), organic acids and aldehydes; nitrogen oxides (NO, NO<sub>2</sub>, N<sub>2</sub>O), hydrogen cyanide

**Hazardous Polymerization:** Polymerization can be initiated by mixing with water, alcohol, amines, sulfides, strong bases, compounds which can cause heating and pressure build-up.

**Incompatibilities:** Water, amines, alcohols, flame, heat.

**Conditions to Avoid:** Incompatible materials, combustible materials.

### Section 11: Toxicological Information

**Acute Dose Effects: Eyes:** Draize Test, Rabbit, slightly irritating

**Skin:** Draize Test, Rabbit, slightly irritating

**Oral:** Rat LD50: > 2000 mg/kg

**Inhalation:** Rat LC50: 490 mg/m<sup>3</sup>/4H

### Section 12: Ecological Information

**Environmental Fate:** This product is not expected to bioaccumulate. This product is not readily biodegradable.

**Ecotoxicity:** Polymeric diphenylmethane diisocyanate: Zebrafish (*Brachydanio rerio*) EC<sub>50</sub> 96 hr: > 1000 mg/L. Water flea (*Daphnia magna*) EC<sub>50</sub>, 24 hr: > 1000 mg/L.

4,4' Diphenylmethane diisocyanate: Zebrafish (*Brachydanio rerio*) LC<sub>50</sub> 24 hr: > 500 mg/L.

Fathead minnow (*Pimephales promelas*) EC<sub>50</sub> 96 hr: 4-10 mg/L. Water flea (*Daphnia magna*) EC<sub>50</sub>, 24 hr: > 500 mg/L.

### Section 13: Disposal Considerations

**As a waste, this material in its raw form IS NOT considered a HAZARDOUS WASTE under RCRA (29 CFR 261).**

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

### Section 14: Transport Information

**U.S. Domestic Ground** **Proper Shipping Name:** Not regulated for transport  
**DOT Hazard Class:** N/A  
**UN Number:** N/A  
**Packing Group:** N/A

**U.S. Domestic Air** **Proper Shipping Name:** Not regulated for transport  
**DOT Hazard Class:** N/A  
**UN Number:** N/A  
**Packing Group:** N/A

**Canadian TDG** **Proper Shipping Name:** Not regulated for transport  
**DOT Hazard Class:** N/A  
**UN Number:** N/A  
**Packing Group:** N/A

**International Air** **Proper Shipping Name:** Not regulated for transport  
**DOT Hazard Class:** N/A

**UN Number:** N/A  
**Packing Group:** N/A

**CERCLA Reportable Quantity (RQ):** N/A

Releases exceeding the reportable quantity (RQ) must be reported to the National Response Center **(800) 424-8802**.  
**This data provided for information only. The description shown may not apply to all shipping situations.**  
**Consult 49 CFR, or appropriate regulations to properly classify your shipment for transportation.**

### Section 15: Regulatory Information

**TSCA Chemical Inventory:** All of the chemicals in this product are listed on the TSCA Inventory.

**TSCA Sec 4 Chemical Test Rule:** None of the chemicals in this product are under a Chemical Test Rule.

**TSCA Sec 8(d):** None of the chemicals in this product are on the Health and Safety Reporting List.

**TSCA Sec 12(b) Notices of Export:** None of the chemicals in this product are on this list.

**TSCA Significant New Use Rule (SNUR):** None of the chemicals in this product are on this list.

**SARA Sec 302 (EHS) TPQ:** None of the chemicals in this product have a TPQ.

**SARA Sec 302 (EHS) RQ:** 4,4' Diphenylmethane diisocyanate: final RQ: 5000 pounds.

**SARA Sec 311/312:** Acute – 4,4' Diphenylmethane diisocyanate; Chronic – No; Fire – No; Release of Pressure – No; Reactivity – No

**SARA 313 List:** 4,4' Diphenylmethane diisocyanate is reportable under Section 313 Title III and 40 CFR Part 372.

**CERCLA Hazardous Substances and corresponding RQs:** 4,4' Diphenylmethane diisocyanate 5000 lbs; this product 15,600 lbs.

**RCRA:** None of the chemicals in this product are on this list.

**Clean Air Act: Hazardous Air Pollutants?** No **Class 1 Ozone Depletors?** No **Class 2 Ozone Depletors?** No

**Clean Water Act: Hazardous Substance?** No **Priority Pollutant?** No **Toxic Pollutant?** No

**Chemical Weapons Convention:** None of the chemicals in this product are on this list.

**Drug Enforcement Agency (DEA) CDTA:** None of the chemicals in this product are on this list.

**OSHA:** None of the chemicals in this product are considered Highly Hazardous by OSHA.

**State Right-to-Know Lists:** 4,4' Diphenylmethane diisocyanate is found on the Right-to-Know lists of California, New Jersey, Pennsylvania, Minnesota and Massachusetts.

**California Proposition 65:** None of the chemicals in this product are on this list.

**Canadian:** This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by the Controlled Products Regulations.

The components in this product are listed, or exempt from listing, on the Canadian Domestic Substances List.

**WHMIS Classification:** B3, D2B

**Ingredient Disclosure List:** 4,4' Diphenylmethane diisocyanate is listed on the Canadian Ingredient Disclosure List.

### Section 16: Other Information

See Section 16 at very end of this document. All notes and claims that would appear in this section are found there.

|  |
|--|
| <b>Section 1: Product and Company Identification</b> |
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**Polymerica, Inc.**  
3821 Collins Lane  
Louisville, KY 40245  
Business: 502-326-3670  
FAX: 502-326-3632

**Product Name:** Universal Surfacers – Part C  
**Generic Name:**  
**Synonyms:** NA  
**Product Description:** Cement/sand/pigment mixture  
**CAS #** NA – mixture  
**Date of Revision:** 3 June 2009

**24-Hour Emergency Phone Number: (800) 535-5053 (INFOTRAC) U.S. & Canada**  
**International calls: (352) 323-3500**  
**Use only for spills and releases.**

|   |
|---|
| <b>Section 2: Hazard Identification</b> |
|---|

Dense red powder. **Emergency Overview:** May irritate eyes and skin. May be harmful if ingested or inhaled. Use with adequate ventilation. A2 – suspected human carcinogen.

|                             |          |
|-----------------------------|----------|
| <b>H M I S HEALTH</b>       | <b>1</b> |
| <b>H M I S FLAMMABILITY</b> | <b>1</b> |
| <b>H M I S REACTIVITY</b>   | <b>0</b> |
| <b>PERSONAL PROTECTION</b>  | <b>E</b> |

**OSHA Regulatory Status:** This material is considered hazardous under the OSHA standard.

**WHMIS Classification:** D2A, E

**Potential Health Effects:**

**Inhalation:** May cause irritation to the moist mucous membranes of the nose, throat, and upper respiratory system. Prolonged exposure may cause delay lung damage including silicosis. Silica in sand is a suspected and known carcinogen by inhalation.

**Ingestion:** Ingestion of small amounts is not expected to produce serious effects. Ill effects and gastric disturbances are expected from ingesting large amounts.

**Skin Contact:** May cause irritation. Wet material can cause greater irritation and caustic burns from prolonged contact.

**Eye Contact:** Can cause irritation, redness and tearing. Exposure to wet material can cause caustic burns and blindness. May scratch cornea if rubbed.

**Chronic Exposure:** No information found.

**Aggravation of Pre-existing Conditions:** No information found.

**Target Organs:** Eyes, skin

|  |
|--|
| <b>Section 3: Composition / Information On Ingredients</b> |
|--|

| Component       | Common Names, Synonyms          | CAS #      | EINECS    | Weight % |
|-----------------|---------------------------------|------------|-----------|----------|
| Sand            | Silica, quartz, silicon dioxide | 14808-60-7 | 238-878-4 | > 70     |
| Portland cement | Calcium silicate mixture        | 65997-15-1 | 266-043-4 | > 15     |
| Lime            | Calcium oxide                   | 1305-62-0  | 215-137-3 | < 5      |

**Non-hazardous components may or may not be listed. Carcinogens are listed when present at 0.1% or more; components which are otherwise hazardous according to OSHA are listed when present at 1.0% or more. This is not intended to be complete compositional disclosure. See Section 15 for applicable states right to know and other regulatory information.**

|                                      |
|--------------------------------------|
| <b>Section 4: First Aid Measures</b> |
|--------------------------------------|

**Inhalation:** Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

**Ingestion:** DO NOT induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention immediately.

**Skin:** Immediately flush skin with plenty of water for at least 15 minutes. Get medical attention if irritation develops.

**Eyes:** Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

**Note to Physicians:** N/A

### Section 5: Fire Fighting Measures

**Fire:** Flash point: Does not burn

**Explosion:** Not considered an explosion hazard. The dust from this product is not expected to be an explosion hazard.

**Extinguishing Media:** Water spray, dry chemical, alcohol foam or carbon dioxide. Water spray may be used to keep fire exposed containers cool.

**Special Precautions:** In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

**NFPA Rating:** Health - 1      Flammability - 1      Reactivity - 0      Other – NA

### Section 6: Accidental Release Measures

Ventilate area of leak or spill. Remove all sources of ignition. Wear appropriate personal protective equipment as specified in Section 8. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Contain and recover solid when possible and place in a chemical waste container. Do not flush to sewer! US Regulations (CERCLA) require reporting spills and releases to soil, water and air in excess of reportable quantities. The toll free number for the US Coast Guard National Response Center is (800) 424-8802.

### Section 7: Handling and Storage

Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage. Isolate from any source of heat or ignition. Separate from incompatibles, combustibles, organic or other readily oxidizable materials. Containers of this material may be hazardous when empty since they retain product residues (liquid, vapors); observe all warnings and precautions listed for the product.

### Section 8: Exposure Control / Personal Protection

**Exposure Guidelines:**

| Component       | CAS #      | OSHA PEL                               | ACGIH TLV                                    | NIOSH TLV   |
|-----------------|------------|--|--|---|
| Sand            | 14808-60-7 | None established                       | 0.025 mg/m <sup>3</sup><br>Respirable Quartz | 0.05 mg/m <sup>3</sup> TWA<br>50 mg/m <sup>3</sup> IDLH |
| Portland cement | 65997-15-1 | 5 mg respirable<br>dust/m <sup>3</sup> | 10 mg respirable<br>dust/m <sup>3</sup>      | 5 mg/m <sup>3</sup> TWA                                 |
| Lime            | 1305-62-0  | 5 mg/m <sup>3</sup>                    | None established                             | 2 mg/m <sup>3</sup> TWA<br>25 mg/m <sup>3</sup> IDLH    |

**Personal Protective Equipment:**

**Skin Contact:** Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact. Nitrile and NBR gloves are recommended.

**Eye Contact:** Use chemical safety goggles and/or full face shield where misting or splashing of solutions is possible. Maintain eye wash fountain and quick-drench facilities in work area.

**Inhalation:** Use NIOSH-approved vapor respirator if exposure is unknown or exceeds permissible limits. A respiratory protection program that meets OSHA's 29 CFR 1910.134 or ANSI Z88.2 requirements must be followed whenever workplace conditions warrant respirator use. **WARNING:** Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.

**Engineering Controls:** A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, *Industrial Ventilation, A Manual of Recommended Practices*, most recent edition, for details.

### Section 9: Physical and Chemical Properties

|                  |                  |                         |           |
|------------------|------------------|-------------------------|-----------|
| Appearance       | Dense red powder | Specific Gravity (g/mL) | 2.8 – 3.0 |
| Odor             | Negligible       | pH                      | N/A       |
| Odor Threshold   | ND               | Solubility in water     | Very low  |
| Melting Point    | ND               | % Volatiles             | None      |
| Boiling Point    | ND               | Evaporation Rate        | ND        |
| Flash Point      | NA               | Vapor Pressure          | ND        |
| VOC as component | 0 g/L            | VOC as applied          | 0 g/L     |

**Section 10: Stability and Reactivity**

**Chemical Stability:** This product is stable in closed containers at room temperature. Exposure to water or moisture will cause reaction with hardening and generation of heat.

**Hazardous Decomposition Products:** Calcium hydroxide will result from mixing with water.

**Hazardous Polymerization:** Will not occur.

**Incompatibilities:** Water, acids

**Conditions to Avoid:** Wet conditions, high humidity.

**Section 11: Toxicological Information**

**Acute Dose Effects: Eyes:** No information found.

**Skin:** No information found.

**Oral:** No information found.

**Inhalation:** No information found.

**Section 12: Ecological Information**

**Environmental Fate:** This product is not expected to bioaccumulate. This product is not readily biodegradable.

**Ecotoxicity:** No information found.

**Section 13: Disposal Considerations**

**As a waste, this material IS NOT considered a HAZARDOUS WASTE under RCRA (29 CFR 261).**

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

**Section 14: Transport Information**

**U.S. Domestic Ground**      **Proper Shipping Name:** Not regulated for transport  
**DOT Hazard Class:** N/A  
**UN Number:** N/A  
**Packing Group:** N/A

**U.S. Domestic Air**        **Proper Shipping Name:** Not regulated for transport  
**DOT Hazard Class:** N/A  
**UN Number:** N/A  
**Packing Group:** N/A

**Canadian TDG**            **Proper Shipping Name:** Not regulated for transport  
**DOT Hazard Class:** N/A  
**UN Number:** N/A  
**Packing Group:** N/A

**International Air**        **Proper Shipping Name:** Not regulated for transport  
**DOT Hazard Class:** N/A  
**UN Number:** N/A  
**Packing Group:** N/A

**CERCLA Reportable Quantity (RQ):** N/A

Releases exceeding the reportable quantity (RQ) must be reported to the National Response Center (800) 424-8802.

**This data provided for information only. The description shown may not apply to all shipping situations.**

**Consult 49 CFR, or appropriate regulations to properly classify your shipment for transportation.**

**Section 15: Regulatory Information**

**TSCA Chemical Inventory:** All of the chemicals in this product are listed on the TSCA Inventory.

**TSCA Sec 4 Chemical Test Rule:** None of the chemicals in this product are under a Chemical Test Rule.

**TSCA Sec 8(d):** None of the chemicals in this product are on the Health and Safety Reporting List.

**TSCA Sec 12(b) Notices of Export:** None of the chemicals in this product are on this list.

**TSCA Significant New Use Rule (SNUR):** None of the chemicals in this product are on this list.

**SARA Sec 302 (EHS) TPQ:** None of the chemicals in this product have a TPQ.

**SARA Sec 302 (EHS) RQ:** None of the chemicals in this product have a RQ.

**SARA Sec 311/312:** Acute – YES; Chronic – YES; Fire – NO; Release of Pressure – NO; Reactivity – NO

**SARA 313 List:** None of the chemicals in this product is reportable under Section 313 Title III and 40 CFR Part 372.

**CERCLA Hazardous Substances and corresponding RQs:** N/A.

**RCRA:** None of the chemicals in this product are on this list.

**Clean Air Act: Hazardous Air Pollutants?** NO **Class 1 Ozone Depletors?** NO **Class 2 Ozone Depletors?** NO

**Clean Water Act: Hazardous Substance?** NO **Priority Pollutant?** NO **Toxic Pollutant?** NO

**Chemical Weapons Convention:** None of the chemicals in this product are on this list.

**Drug Enforcement Agency (DEA) CDTA:** None of the chemicals in this product are on this list.

**OSHA:** None of the chemicals in this product are considered Highly Hazardous by OSHA.

**State Right-to-Know Lists:** Sand is found on the Right-to-Know lists of New Jersey, Pennsylvania, Massachusetts and Minnesota. Lime is found on the Right-to-Know lists of New Jersey, Pennsylvania, Rhode Island, Massachusetts and Minnesota.

**California Proposition 65:** This product contains sand, a chemical known to the State of California to cause cancer.

**Canadian:** This product has been classified in accordance with the hazard criteria of the *Controlled Products Regulations* and the MSDS contains all of the information required by the *Controlled Products Regulations*.

The components in this product are listed, or exempt from listing, on the Canadian Domestic Substances List.

**WHMIS Classification:** D2A, E

**Ingredient Disclosure List:** Lime is listed on the Canadian Ingredient Disclosure List.

**Section 16: Other Information**

**Abbreviations and acronyms used:**

|        |   |       |   |
|--------|---|-------|---|
| ACGIH  | American Conference of Governmental Industrial Hygienists | NA    | not applicable, not available                         |
| ANSI   | American National Standards Institute                     | NIOSH | National Institute for Occupational Safety and Health |
| atm    | atmosphere (pressure unit)                                | ND    | not determined  |
| BOD    | biological oxygen demand                                  | NFPA  | National Fire Prevention Association                  |
| CAS    | Chemical Abstracts Service                                | NTP   | National Toxicology Program                           |
| CC     | closed cup  | OC    | open cup  |
| CDTA   | Chemical Drug and Trafficking Act                         | OSHA  | Occupational Safety and Health Administration         |
| COC    | Cleveland Open Cup  | Part  | partition   |
| COD    | chemical oxygen demand                                    | PEL   | permissible exposure limits                           |
| coeff. | coefficient   | ppb   | parts per billion                                     |
| CFR    | Code of Federal Regulations                               | PPE   | personal protective equipment                         |
| CPR    | cardio-pulmonary resuscitation                            | ppm   | parts per million                                     |
| DEA    | Drug Enforcement Agency                                   | psi   | pounds per square inch                                |
| DOT    | Department of Transportation                              | RCRA  | Resource Conservation and Recovery Act                |
| FDA    | Food and Drug Administration                              | RQ    | Reportable quantity                                   |
| IARC   | Internat'l Agency for Research on Cancer                  | RTK   | Right to Know   |
| IDLH   | immediate danger to life and health                       | SARA  | Superfund Amendments and Reauthorization Act          |
| kg     | kilogram  | STEL  | short-term exposure limit                             |
| L      | liter   | TCC   | Tagliabue Closed Cup                                  |
| LC50   | median lethal concentration                               | TPQ   | threshold planning quantity                           |
| LD50   | median lethal dose  | TQ    | threshold quantity                                    |
| LEL    | lower explosive limit                                     | TSCA  | Toxic Substances Control Act                          |
| mg     | milligram   | TWA   | time-weighted average                                 |
| mL     | milliliter  | UEL   | upper explosive limit                                 |

This document was prepared in accordance with 29 CFR 1910.1200 and ANSI Z400.1-2005.  
Prepared by Douglas R. Chrisope on 3 June 2009.

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