



SubSeal Waterproofing & Crack Suppression Membrane

MATERIAL SAFETY DATA SHEET

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|---|-----------------|-----|--------------------|-----|------------------------|--|
| <i>May be used to comply with OSHA's Hazard Communication Standard, 29 CFR 1910.1200. Standard must be consulted for specific requirements.</i> | | | PRODUCT NAME: | | SUBSEAL 50, SUBSEAL 10 | |
| | | | DATE PREPARED: | | OCTOBER 19, 2004 | |
| | | | NAC REVISION DATE: | | January 14, 2010 | |
| N/E | Not Established | N/R | Not Regulated | N/A | Not Available | |

SECTION 1 • Product and Company Identification

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|--------------------------|---|
| PRODUCT / CHEMICAL NAME: | SubSeal 50, SubSeal 10 |
| PRODUCT CODE(S): | 040020001, 040020005, 040020008, 040020016, 041020010 |
| MANUFACTURER: | National Applied Construction Products, Inc. |
| ADDRESS: | 3200 S. Main Street Akron, OH 44319 |
| EMERGENCY PHONE: | 800-633-4622 (8:30 am to 5 pm, Eastern Standard Time) |
| TELEPHONE: | 330-644-3117 |
| FAX: | 330-644-3557 |
| CHEMICAL NAME: | Water base Coating Mixture |
| CHEMICAL FORMULA: | Styrene-Butadiene Polymer/Water Mixture |
| GENERAL USE: | Liquid Waterproofing Membrane |

SECTION 2 • Composition / Information on Ingredients

| INGREDIENT: | CAS NO: | % WT: | % VOL: | SARA 313 REPORTABLE: | PPM: | MG/M3: |
|--------------------------------------|---|-------------------|-------------------------|----------------------|--------------------|--------|
| CALCIUM CARBONATE | 1317-65-3 | N/A | N/A | NONE | | |
| OCCUPATIONAL EXPOSURE LIMITS: | | | | | | |
| OSHA PEL-TWA: | OSHA PEL STEL: | OSHA PEL CEILING: | ACGIH TLV-TWA: | ACGIH TLV STEL: | ACGIH TLV CEILING: | |
| 1. 15 mg/m ³ (total dust) | 1. N/A | 1. N/A | 1. 10 mg/m ³ | 1. N/A | 1. N/A | |
| SECTION 2 NOTES: | Calcium Carbonate is an irritant to the eyes, respiratory system and skin only when in dust or powder form. Suggested TLV for product is 10 mg/m ³ as Particles or Particulate (insoluble or poorly soluble) Not Otherwise Specified (PNOS). See Appendix B of the TLVS and BEIs for Chemical Substances and Physical Agents published by the American Conference of Governmental Industrial Hygienists. | | | | | |

SECTION 3 • Hazards Identification

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| EMERGENCY OVERVIEW: | | | | | | | | | |
| ROUTES OF ENTRY: | Eye, Skin Contact, Inhalation of spray mists and vapors | | | | | | | | |
| POTENTIAL HEALTH EFFECTS: | <table border="1"> <tr> <td>EYES:</td> <td>Direct contact with this material may cause eye irritation including tearing and redness.</td> </tr> <tr> <td>SKIN:</td> <td>Contact may cause skin irritation</td> </tr> <tr> <td>INHALATION:</td> <td>Inhalation of vapor, aerosols, spray mists may cause irritation to the respiratory tract including (nose, throat, and lungs.)</td> </tr> <tr> <td>INGESTION:</td> <td>Swallowing may irritate the mouth throat and stomach. Not considered an anticipated route of entry</td> </tr> </table> | EYES: | Direct contact with this material may cause eye irritation including tearing and redness. | SKIN: | Contact may cause skin irritation | INHALATION: | Inhalation of vapor, aerosols, spray mists may cause irritation to the respiratory tract including (nose, throat, and lungs.) | INGESTION: | Swallowing may irritate the mouth throat and stomach. Not considered an anticipated route of entry |
| | EYES: | Direct contact with this material may cause eye irritation including tearing and redness. | | | | | | | |
| | SKIN: | Contact may cause skin irritation | | | | | | | |
| | INHALATION: | Inhalation of vapor, aerosols, spray mists may cause irritation to the respiratory tract including (nose, throat, and lungs.) | | | | | | | |
| INGESTION: | Swallowing may irritate the mouth throat and stomach. Not considered an anticipated route of entry | | | | | | | | |
| ACUTE HEALTH HAZARDS: | Eye Irritation-Inhalation of vapor, aerosols, spray mists | | | | | | | | |

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| CHRONIC HEALTH HAZARDS: | None Known for product. | |
| MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: | Persons with preexisting skin or respiratory disorders may be more susceptible to the effects of this product. | |
| CARCINOGENICITY: | OSHA: | None |
| | ACGIH: | None |
| | NTP: | None |
| | IARC: | None |
| | OTHER: | |
| CAUTION: | N/A | |
| HAZARDOUS: | N/A | |

SECTION 4 • First Aid Measures

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| EYES: | Immediately flush eyes with large quantities of clean water for at least 15 minutes. Get immediate medical attention. |
| SKIN: | Wash skin with soap and water. Remove contaminated clothing. If irritation develops and persists, get medical attention. Wash contaminated clothing before reuse. |
| INHALATION: | Remove affected person to fresh air. Seek medical attention if breathing difficulty develops. |
| INGESTION: | Give the victim one or two glasses of water or milk. Never give anything by mouth to an unconscious or convulsing person. Get immediate medical attention. |
| NOTES TO PHYSICIANS OR FIRST AID PROVIDERS: | N/A |

SECTION 5 • Fire Fighting Measures

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| FLAMMABLE LIMITS IN AIR (% BY VOLUME): | UPPER: | Not Applicable | LOWER: | Not Applicable | | | | | |
| FLAMMABILITY CLASS: | Not Applicable | | FIRE-FIGHTING MEASURES | | | | | | |
| FLASH POINT: @ F & C | Not Applicable | | FLASH POINT: | <i>Lowest temperature at which a flammable liquid gives off enough vapor to form an ignitable mixture with air. At a glance you can tell from a low flash point that a material represents a fire hazard: for example, the flash point of gasoline is -43 deg C (-45 deg F)</i> | | | | | |
| AUTO-IGNITION TEMPERATURE: @ F & C | Not Applicable | | AUTO-IGNITION TEMPERATURE: | <i>Tells you how hot a material must be before it will set itself on fire without a flame or spark.</i> | | | | | |
| NFPA HAZARD CLASSIFICATION: | | | | | | | | | |
| HEALTH: | 1 | FLAMMABILITY: | 0 | REACTIVITY: | 0 | PPI: | | OTHER: | |
| HMIS HAZARD CLASSIFICATION: | | | | | | | | | |
| HEALTH: | 1 | FLAMMABILITY: | 0 | REACTIVITY: | 0 | PPI: | E | OTHER: | |
| EXTINGUISHING MEDIA: | Use carbon dioxide, foam, dry chemical or water fog to extinguish fire. | | LEL: | <i>Lower Explosive Limit – the lowest concentration at which a chemical's vapors will cause an explosion. Concentrations below the LEL are considered "too lean"</i> | | | | | |
| | | | UEL: | <i>Upper Explosive Limit – the maximum concentration at which a chemical's vapor will cause an explosion. Concentrations greater than the UEL are considered "too rich"</i> | | | | | |
| | | | FLAMMABLE LIMITS | <i>Details about the minimum and maximum concentrations of vapors, so you can prevent fires. Generally concentrations that are greater than the LEL but less than the UEL</i> | | | | | |
| SPECIAL FIREFIGHTING PROCEDURES: | Wear self-contained breathing apparatus and full fire-fighting protective clothing. Thoroughly decontaminate all protective equipment after use. | | EXTINGUISHING MEDIA: | <i>Which extinguishing material to use (water, foam, fog, carbon dioxide, dry chemical, etc.)</i> | | | | | |

SECTION 5 • Fire Fighting Measures • Continued from Previous Page

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| UNUSUAL FIRE AND EXPLOSION HAZARDS: | Containers of this material may build up pressure if exposed to heat. Use water spray to cool fire-exposed containers. This material will only burn when evaporated to dryness. | UNUSUAL FIRE OR EXPLOSION HAZARDS: | <i>Any special conditions or precautions concerning fire and explosion that are unique to the chemical.</i> |
| | | HAZARDOUS COMBUSTION PRODUCT: | |
| | | FIRE-FIGHTING INSTRUCTIONS: | <i>Special procedures that are recommended during fire fighting.</i> |
| | | FIRE-FIGHTING EQUIPMENT: | <i>Special equipment or safeguards that are recommended during fire fighting.</i> |
| HAZARDOUS DECOMPOSITION PRODUCTS: Irritating and toxic gases, vapors, and dusts may be generated and released during combustion. | | | |

SECTION 6 • Accidental Release Measures

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| SPILL / LEAK PROCEDURES: | For small spills/leaks less than 50 gallons, absorb material with inert material and place in an approved chemical waste container. For larger spills >50 gallons, Dam, Dike or Divert spill or leak with appropriate inert material or spill booms or pigs. Use vacuum or transfer pump to transfer liquid to appropriate chemical waste containers. Reuse uncontaminated product if possible. Prevent spill from contaminating soil, entering sanitary sewers, storm sewers, drainage systems or waterways especially those with aquatic life. Product is water dispersible. Flush spill area with water. Notify proper authorities as required by local, state and federal regulations. |
| WASTE DISPOSAL METHOD: | Dispose of in accordance with federal, state and local regulations. |

SECTION 7 • Handling and Storage

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| STORAGE REQUIREMENTS: | Protect from freezing. Frozen product may be terminally destroyed. Store in a cool dry area ideally from 40-100 F. Keep container closed when not in use. |
| HANDLING PRECAUTIONS: | Avoid prolonged or repeated skin contact. Avoid contact with eyes. Avoid breathing of vapors, mists or aerosols. Wash hands thoroughly after handling and before eating or drinking. Use with adequate ventilation. |
| OTHER PRECAUTIONS: | The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by use of this material. It is the responsibility of the user to comply with all applicable federal, state and local laws and regulations. |

SECTION 8 • Exposure Controls / Personal Protection

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| ENGINEERING CONROLS: | |
| VENTILATION: | General ventilation to ensure exposures do not exceed the listed TLV |
| RESPIRATORY PROTECTION: | Where air contaminants can exceed acceptable criteria, use NIOSH/MSHA approved respiratory protection equipment. |
| EYE PROTECTION: | Chemical Splash Goggles |
| SKIN PROTECTION: | Chemical resistant gloves |
| OTHER PROTECTIVE CLOTHING OR EQUIPMENT: | Normal protective clothing to prevent prolonged or repeated skin contact. |
| WORK HYGIENIC PRACTICES: Avoid prolonged or repeated skin contact. Avoid contact with eyes. Avoid breathing of vapors, mists or aerosols. Wash hands thoroughly after handling and before eating or drinking. Use with adequate ventilation | |
| EXPOSURE GUIDELINES: Assure control of air contaminants to within the suggested TLV of this product. SEE SECTION 2. | |

SECTION 9 • Physical and Chemical Properties

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| APPEARANCE FORM: | MILKY OPAQUE LIQUID |
| APPEARANCE/COLOR: | WHITE |
| ODOR: | SLIGHT AROMATIC |
| PHYSICAL STATE: | LIQUID |

SECTION 9 • Physical and Chemical Properties • Continued from Previous Page

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|---------------------------------------|--------------------|-----|--------------------|---------|
| PH VALUE: | 8-10 | | | |
| BOILING POINT: @ F & C | APPROX. 212 F | | | |
| MELTING POINT: @ F & C | NOT APPLICABLE | | | |
| FREEZING POINT: @ F & C | <32 F | | | |
| VAPOR PRESSURE (MMHG): @ F & C | N/A | | | |
| VAPOR DENSITY: (AIR=1) @ F & C | N/A | | | |
| SPECIFIC GRAVITY: (H2O=1) @ F & C | 1.14 (9.5 LBS/GAL) | | | |
| EVAPORATION RATE: | N/A | | | |
| BASIS (=1): | N/A | | | |
| SOLUBILITY IN WATER: | DISPERSIBLE | | | |
| PERCENT SOLIDS BY WEIGHT: | 55-57 | | | |
| PERCENT VOLATILE: | By weight: | <45 | By volume @ F & C: | N/A |
| PARTITION COEFFICIENT: | | | | |
| VOLATILE ORGANIC COMPOUNDS (VOC): | With Water: | N/A | Without Water: | .22 g/L |
| MOLECULAR WEIGHT (VISCOSITY): @ F & C | N/A | | | |
| HEAVY ELEMENTS (PPM): | N/A | | | |
| SECTION 9 NOTES: | | | | |

SECTION 10 • Stability and Reactivity

| CONDITIONS TO AVOID (STABILITY): | | EXPLANATION OF TERMS | |
|---|---|---|---|
| STABILITY: | Stable | STABILITY: | <i>How likely it is that a chemical will decompose, creating a dangerous situation. If the material is unstable, the MSDS lists the conditions that would create a hazardous product.</i> |
| INCOMPATIBILITY (MATERIAL TO AVOID): | Acids, Alum, Ammonium Salts, and Mercury/Hydrogen Mixtures. | INCOMPATIBILITY: | <i>Lists the materials to avoid with the chemical to prevent a hazardous reaction. (i.e. acid and bases)</i> |
| HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: | Irritating and toxic gases, vapors, and dusts. | HAZARDOUS DECOMPOSITION OR BYPRODUCTS: | <i>Conditions and materials that can cause a chemical to break down and become a hazard or what may be produced when the chemical reacts with other substances. These include temperature extremes, ignition sources, and other chemicals. Sometimes, the product of a reaction is far more hazardous than the chemical itself.</i> |
| HAZARDOUS POLYMERIZATION: | Will Not Occur | HAZARDOUS POLYMERIZATION: | <i>Large amounts of energy may be released when two or smaller molecules combine. If this is a danger, the MSDS lists the conditions that can lead to it.</i> |
| CONDITIONS TO AVOID (POLYMERIZATION): | N/A | | |

SECTION 11 • Toxicological Information

TOXICOLOGICAL INFORMATION: No Data Available for Product or Ingredients.

SECTION 12 • Ecological Information

ECOLOGICAL INFORMATION: No Data Available for Product or Ingredients.

SECTION 13 • Disposal Considerations

WASTE DISPOSAL METHOD: Transfer absorbed wastes to approved landfill pending federal, state and local regulations.

RCRA HAZARD CLASS: This material is not regulated under RCRA 40CFR Part 261.

SECTION 14 • Transport Information

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| U.S. DEPARTMENT OF TRANSPORTATION | Proper Shipping Name: SubSeal 50, SubSeal 10 Hazard Class: N/A ID Number: N/A Packing Group: N/A Label Statement: N/A |
| WATER TRANSPORTATION: | Proper Shipping Name: SubSeal 50, SubSeal 10 Hazard Class: N/A ID Number: N/A Packing Group: N/A Label Statement: N/A |
| AIR TRANSPORTATION: | Proper Shipping Name: SubSeal 50, SubSeal 10 Hazard Class: N/A ID Number: N/A Packing Group: N/A Label Statement: N/A |
| OTHER AGENCIES: | Canadian TDG: Proper Shipping Name: SubSeal 50, SubSeal 10 |
| SECTION 14 NOTES: | StrataSeal 50 is not regulated by DOT or TDG |

SECTION 15 • Regulatory Information

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| U.S. FEDERAL REGULATIONS: | TSCA (Toxic Substance Control Act): N/A CERCLA HAZARDOUS SUBSTANCE (40 CFR 302.4): N/A SARA Title III SECTION 313: N/A SARA 311/312 HAZARD CATEGORIES: Immediate Acute Health Hazard 313 REPORTABLE INGREDIENTS: N/A |
| STATE REGULATIONS: | Toxic/Flammable Substance Subject to Accidental Release Prevention (40 CFR 68.130): N/A RCRA Hazardous Waste Number (40 CFR 261.33): N/A Classified as a RCRA Hazardous Waste (40 CFR 261.21): N/A CERCLA Reportable Quantity (RQ): N/A SARA Toxic Chemical (40 CFR 372.65): N/A SARA EHS (Extremely Hazardous Substance) (40 CFR 355): N/A |
| INTERNATIONAL REGULATIONS: | CALIFORNIA PROP 65: NONE WHMIS: D 2 B |

SECTION 16 • Other Information

PREPARATION INFORMATION:

DISCLAIMER: JUDGMENTS AS TO THE SUITABILITY OF INFORMATION HEREIN FOR THE PURCHASER'S PURPOSES ARE NECESSARILY THE PURCHASER'S RESPONSIBILITY. ALTHOUGH REASONABLE CARE HAS BEEN TAKEN IN THE PREPARATION OF SUCH INFORMATION, NATIONAL APPLIED CONSTRUCTION PRODUCTS, INC. EXTENDS NO WARRANTIES, MAKES NO REPRESENTATIONS, AND ASSUMES NO RESPONSIBILITY AS TO THE ACCURACY OR SUITABILITY OF SUCH INFORMATION FOR APPLICATION TO THE PURCHASER'S INTENDED PURPOSE OR FOR CONSEQUENCES OF ITS USE.