

AV-200 Dura-Set  
MATERIAL SAFETY DATA SHEET



Date Issued: 10/22/2008

1. PRODUCT AND COMPANY INFORMATION

**PRODUCT NAME:** AV-200 Dura-Set  
**CLASSIFICATION:** Elastomeric Grout

**MANUFACTURER**  
Avanti International  
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Webster, TX 77598  
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**EMERGENCY TELEPHONE NUMBER**  
Chemtrec: 800.424.9300

2. COMPOSITION/INGREDIENT INFORMATION

Part A

Ingredient / CAS Number	Exposure Limits	Concentration
Synthetic Urethane Polymer CAS #64814-10-4	OSHA TWA: Not established ACGIH STEL: Not established	Trade Secret
Toluene Diisocyanate (TDI) CAS #584-84-9	OSHA TWA: 0.005 ppm ACGIH STEL: 0.02 ppm	Trade Secret

Part B

Ingredient / CAS Number	Exposure Limits	Concentration
Polyol and Aromatic Diamine Blend CAS #9082-00-2		Trade Secret
Proprietary Aryl Mercury Compound	OSHA PEL: 0.1 mg/m <sup>3</sup> (ceiling) ACGIH TLV: 0.1 mg/m <sup>3</sup> TWA	Trade Secret
Aromatic Diamine	OSHA: Not established ACGIH: Not established	Trade Secret

3. HAZARDS IDENTIFICATION

Part A

**EYE CONTACT:** Contact and/or vapors can cause eye irritation.

**SKIN CONTACT:** May cause skin irritation.

**INHALATION:** Exposure to vapor can cause irritation to lungs and mucous membranes. Repeated inhalation of minimal amounts of vapor can cause respiratory sensitization and asthma.

Part B

**HEALTH HAZARDS:** This product will not exert a significant adverse effect to health from any route of exposure.

## 4. FIRST AID MEASURES

### Part A

**EYES:** Flush with water for at least 15 minutes. Get medical attention.

**SKIN:** Wipe excess. Wash with rubbing alcohol, if available, followed by soap and water. Discard shoes if contaminated.

**INHALATION:** Remove to fresh air. See physician for potential respiratory irritation.

### Part B

**EYES:** Not an eye irritant.

**SKIN:** Not a skin irritant. Washing any substance off the skin with water is a good safety practice.

**INHALATION:** This product is not toxic by inhalation. Remove to fresh air.

**INGESTION:** Immediately drink water to dilute. Consult a physician if symptoms develop.

## 5. FIRE AND EXPLOSION HAZARDS

### Part A

**FLASH POINT:** >400°F (204°C)

**FLAMMABLE LIMITS:** Not determined

**AUTOIGNITION TEMPERATURE:** Not determined

**EXTINGUISHING MEDIA:** Dry chemical or water spray.

**PROTECTIVE EQUIPMENT:** Wear self-contained breathing apparatus and full protective clothing.

**SPECIAL FIRE FIGHTING PRECAUTIONS:** Protect against inhalation of cyanate vapors and other decomposition/combustion products.

### Part B

**FLASH POINT:** >500°F (Test Method: Cleveland Open Cup)

**FLAMMABLE LIMITS:** Not determined

**AUTOIGNITION TEMPERATURE:** Not determined

**EXTINGUISHING MEDIA:** Carbon dioxide, dry chemical or water spray.

**FIRE FIGHTING PROCEDURES:** Use water to cool containers exposed to fire. Use normal fire fighting equipment. Additional respiratory protection is necessary when a spill or fire involving this product occurs. You are recommended to use a cartridge type NIOSH/OSHA approved respirator with dust/mist cartridges. Additional protective clothing must be worn to prevent personal contact with this material. Those items include but are not limited to boots, impervious gloves, hardhat, splash-proof goggles, impervious clothing (chemically impermeable suit).

## 6. ACCIDENTAL RELEASE MEASURES

### Part A

**GENERAL PROCEDURES:** Absorb on inert carrier. Transfer to open containers outside or in well-ventilated area. Soak with dilute ammonia hydroxide or water alcohol mixture. Allow time for reaction to be complete before disposal.

### Part B

**GENERAL PROCEDURES:** Stop source of spill and notify appropriate personnel.

**WATER RELEASE:** This material is slightly soluble in water and may be subject to emulsification. Divert flow of water and contain that which is contaminated. Remove as a liquid utilizing a vacuum or pumping system as possible.

**LAND SPILL:** Dike spill area and begin to remove as a liquid. If unable to do so, absorb in clay, sand or a commercial absorbent and containerize for disposal. Compatible absorbents sand, clay soil.

## 7. HANDLING AND STORAGE

### Part A

**HANDLING:** Take measures not to raise dust, mist and vapor. Wear protective clothing and respiratory protection. After leaving area, decontaminate all clothing. Wash hands and exposed skin areas thoroughly. Empty containers contain residue; observe all precautions and warnings listed for the product. Clean up the work area if contaminated.

**STORAGE:** Store away from sources of direct heat and moisture. Seal containers with a dry nitrogen blanket and keep closed when not in use. Moisture contamination will evolve CO<sub>2</sub> and create pressure in closed systems.

### Part B

**HANDLING:** Take measures not to raise dust, mist and vapor. Wear protective clothing and respiratory protection. After leaving area, decontaminate all clothing. Wash hands and exposed skin areas thoroughly. Empty containers contain residue; observe all precautions and warnings listed for the product. Clean up the work area if contaminated.

**STORAGE:** Do not store at temperatures above 120°F (49°C).

## 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

### Part A

**ENGINEERING CONTROLS:** Local exhaust ventilation is strongly recommended.

#### PERSONAL PROTECTIVE EQUIPMENT

**EYES AND FACE:** Wear chemical resistant goggles.

**SKIN:** Wear chemical resistant gloves.

**RESPIRATORY:** In the absence of good ventilation, under emergency situations or for high concentrations, self-contained or air-supplied respiratory protection is recommended.

**OTHER PROTECTIVE EQUIPMENT:** Provide eyewash fountain and quick drench facilities in close proximity to points of potential exposure.

**HYGIENE PRACTICES:** Wash with soap and water after handling. Remove contaminated clothing and wash before reuse. Clean and inspect PPE before reuse. Do not eat, drink, or smoke in work area.

### Part B

**ENGINEERING CONTROLS:** Local exhaust ventilation is recommended if vapors, mists or aerosols are generated; otherwise, use general exhaust.

#### PERSONAL PROTECTIVE EQUIPMENT

**EYES AND FACE:** Wear safety glasses with side shields.

**SKIN:** Wear chemical resistant gloves and apron.

**RESPIRATORY:** Not normally required at room temperature. In the absence of good ventilation, if vapor or mist is generated through heating or spray applications use supplied air respirator or respirator with organic vapor cartridges.

**OTHER PROTECTIVE EQUIPMENT:** Provide eyewash fountain and quick drench facilities in close proximity to points of potential exposure.

**HYGIENE PRACTICES:** Wash with soap and water after handling. Remove contaminated clothing and wash before reuse. Clean and inspect PPE before reuse. Do not eat, drink, or smoke in work area.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Part A

**APPEARANCE AND ODOR:** Clear liquid with slight odor

**BOILING POINT:** Not determined

**MELTING POINT:** Not determined

**VAPOR PRESSURE (mm Hg) @ 20°C:** Not determined

**VAPOR DENSITY (Air=1):** Not determined

**SPECIFIC GRAVITY (Water=1):** 1.02-1.11

**VOLATILITY @ 70°F:** Low

**SOLUBILITY IN WATER:** Reacts in water, soluble in THF, DMF, or methylene chloride

**SOLIDIFICATION POINT:** <60°F (16°C)

**REACTIVE ISOCYANATE (NCO):** 2.8-12.45

### Part B

**APPEARANCE AND ODOR:** Beige liquid with slightly musty to no odor

**BOILING POINT:** Not determined

**FREEZING POINT:** Not determined

**pH @25°C:** 4-8" 10/6 isopropanol/water

**EVAPORATION RATE:** N/A

**VAPOR PRESSURE (mm Hg):** 0.01-3.5 @ 25°C

**BULK DENSITY:** N/A

**SPECIFIC GRAVITY (Water=1):** 0.9-1.1

**SOLUBILITY IN WATER:** Soluble to slightly soluble

## 10. STABILITY AND REACTIVITY

### Part A

**STABILITY:** Stable at ambient temperatures and pressures.

**MATERIALS TO AVOID:** Avoid contamination with water, solvents and any foreign matter.

**DECOMPOSITION PRODUCTS:** High temperatures will release cyanates and hydrocarbons. Oxides of carbon, nitrogen and small amount of HCN under burning conditions.

### Part B

**STABILITY:** Stable at ambient temperatures and pressures.

**MATERIALS TO AVOID:** Strong oxidizers.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Carbon monoxide, carbon dioxide and other fragments which have not been identified.

**HAZARDOUS POLYMERIZATION:** Will not occur.

## 11. TOXICOLOGICAL INFORMATION

### Part A

**CARCINOGENICITY:** This material is listed as a potential carcinogen by IARC (2b) and NTP. This product contains toluene Diisocyanate (TDI) that is known to the State of California to cause cancer.

**GENERAL:** There is no acute toxicology data on this material; however, residual TDI (0.02-4.0%) does possess irritancy and sensitization potential.

**CHRONIC:** Oral gavage administration of TDI in corn oil to rats and mice for 2 years resulted in an increased incidence of tumors. Six hour daily inhalation exposures to rats and mice of 0.05 and 0.15 ppm TDI for 2 years did not produce tumors. Since inhalation is the usual route of human exposure, the carcinogenic potential of TDI to humans has not been established.

### Part B

**CARCINOGENICITY:** This product is not known or reported to be carcinogenic by any reference source including IARC, OSHA, NTP, and EPA.

**MUTAGENICITY:** This product is not known or reported to be mutagenic.

**REPRODUCTIVE AND DEVELOPMENTAL TOXICITY:** There are no known or reported effects on reproductive function pre-fetal development.

## 12. ECOLOGICAL INFORMATION

This material is not expected to be toxic to aquatic life.

## 13. DISPOSAL CONSIDERATIONS

Dispose of in accordance with local, state, and federal regulations.

## 14. TRANSPORT INFORMATION

### DOT (DEPARTMENT OF TRANSPORTATION)

**PROPER SHIPPING NAME:** Liquid Resin (non-regulated)

**HAZARD CLASS:** None

**UN NUMBER:** None

**PACKING GROUP:** None

**LABEL:** None

**PLACARD:** None

### NMFC (NATIONAL MOTOR FREIGHT CARRIERS)

**FREIGHT CLASS:** 55

## 15. REGULATORY INFORMATION

### SARA TITLE III

**SECTION 313:** Delayed Health Hazard

**REPORTABLE QUANTITY:** 100 lbs (40 CFR 302)

**THRESHOLD PLANNING QUANTITY:** Not established (40 CFR 355)

**TSCA REGULATORY:** All components of this product are either on the TSCA Inventory or exempt.

## 16. OTHER INFORMATION

The information on this MSDS is accurate to the best of Avanti International's knowledge. Avanti International makes no expressed or implied warranty, and in no case shall be liable for consequential, special, or indirect damages resulting from the use or handling of this product.