

Safety Data Sheet

SECTION 1. IDENTIFICATION

| Product Identifier Other Means of Identification | AV-202 MULTIGROUT® Hydrophilic Grout |
|--|---|
| Other Identification Recommended Use | HYDROPHILIC POLYURETHANE FOAM Industrial Use Only. |
| Restrictions on Use | None known. |
| Manufacturer/Supplier Identifier | Avanti International, 822 Bay Star Blvd, Webster, TX, 77598, USA, 281.486.5600, avantigrout.com |
| Emergency Phone No. | ChemTrec, 800.424.9300 |
| Date of Preparation | March 09, 2018 |

SECTION 2. HAZARD IDENTIFICATION

Classified according to Canada's Hazardous Products Regulations (WHMIS 2015) and the US Hazard Communication Standard (HCS 2012).

Classification

Skin irritation - Category 2; Respiratory sensitization - Category 1; Skin sensitization - Category 1 Label Elements



| \mathbf{v} | |
|---------------|--|
| Signal Word: | |
| Danger | |
| Hazard Stater | nent(s): |
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H334 | May cause allergy or asthma symptoms or breathing difficulties if inhaled. |
| Precautionary | Statement(s): |
| Prevention: | |
| P261 | Avoid breathing dust/fume/gas/mist/vapours/spray. |
| P264 | Wash hands and skin thoroughly after handling. |
| P272 | Contaminated work clothing must not be allowed out of the workplace. |
| P280 | Wear protective gloves. |
| P284 | In case of inadequate ventilation wear respiratory protection (NIOSH approved air-purifying respirator |
| with N100, R1 | 00, or P100 filter; NIOSH approved air-purifying respirator with an organic vapour cartridge). |
| Response: | |
| P302 + P352 | IF ON SKIN: Wash with plenty of water/ |
| Soap | |
| P304 + P341 | IF INHALED: If breathing is difficult, remove person to fresh air and keep comfortable for breathing. |
| P333 + P313 | If skin irritation or rash occurs: Get medical advice or attention. |
| D040 + D044 | If a manipulation size instance a manipulation of the DOLOON OFNITE and a stan |

P342 + P311 If experiencing respiratory symptoms: Call a POISON CENTRE or doctor.

P362 + P364 Take off contaminated clothing and wash it before reuse.

Disposal: Dispose of contents and container in accordance with local, regional, national and international regulations.

Other Hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture:

P501

| Chemical Name | CAS No. | % | Other Identifiers | Other Names |
|-------------------------------------|-----------|-----|-------------------|-------------|
| Polymethylene polyphenyl isocyanate | 9016-87-9 | 20 | PMDI | |
| Propylene carbonate | 108-32-7 | 4 | PC | |
| Toluene-2,4-diisocyanate | 584-84-9 | 0.5 | 2,4-TDI | |

SECTION 4. FIRST-AID MEASURES

First-aid Measures

Inhalation

Remove source of exposure or move to fresh air. Get medical advice or attention if you feel unwell or are concerned.

Skin Contact

Avoid direct contact. Wear chemical protective clothing if necessary. Wash gently and thoroughly with lukewarm, gently flowing water and mild soap for 5 minutes.

Eve Contact

Avoid direct contact. Wear chemical protective gloves if necessary. Immediately rinse the contaminated eye(s) with lukewarm, gently flowing water for 15-20 minutes, while holding the eyelid(s) open.

Ingestion

Rinse mouth with water.

Most Important Symptoms and Effects, Acute and Delayed

If inhaled: can irritate the nose and throat.

Immediate Medical Attention and Special Treatment

Target Organs Respiratory system. **Special Instructions** Not applicable. Medical Conditions Aggravated by Exposure Asthma, respiratory conditions.

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media

Not combustible. Use extinguishing agent suitable for surrounding fire.

Unsuitable Extinguishing Media

None known.

Specific Hazards Arising from the Product

Not sensitive to static discharge.

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In a fire, the following hazardous materials may be generated: very toxic carbon monoxide, carbon dioxide; corrosive, oxidizing nitrogen oxides; very toxic polycyclic aromatic hydrocarbons.

Special Protective Equipment and Precautions for Fire-fighters

Knock down vapours or gases with water fog or fine water spray. Fire-fighters may enter the area if positive pressure SCBA and full Bunker Gear is worn.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, and Emergency Procedures

Get expert advice. Do not touch damaged containers or spilled product unless wearing appropriate protective equipment.

Environmental Precautions

Do not allow into any sewer, on the ground or into any waterway.

Methods and Materials for Containment and Cleaning Up

Small spills or leaks: stop or reduce leak if safe to do so. Contain and soak up spill with absorbent that does not react with spilled product. Large spills or leaks: dike spilled product to prevent runoff. Get expert advice before treating the spilled product with other chemicals to make it less hazardous. Store recovered product in suitable containers that are: tightly-covered.

Other Information

Contact supplier, local fire and emergency services for help.

SECTION 7. HANDLING AND STORAGE

Precautions for Safe Handling

Obtain special instructions before use. Prevent skin contact. Do not get in eyes. Prevent uncontrolled release of product. Immediately report leaks, spills or failures of the safety equipment (e.g. ventilation system). Wear personal protective equipment to avoid direct contact with this chemical. General hygiene considerations: do NOT eat, drink or store food in work areas. Consider using a double locker-shower facility. Wash hands thoroughly after handling this product and before eating, using the washroom or leaving work area. Thoroughly clean clothing, shoes and leather goods before reuse or dispose of safely.

Conditions for Safe Storage

Store in an area that is: ventilated.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

| | ACGIH TLV® | | OSHA PEL | | AIHA WEEL | |
|-------------------------------------|------------|-----------|----------|----------|-----------|-----|
| Chemical Name | TWA | STEL | TWA | Ceiling | 8-hr TWA | TWA |
| Polymethylene polyphenyl isocyanate | 0.005 ppm | | | 0.02 ppm | | |
| Toluene-2,4-diisocyanate | 0.001 ppm | 0.005 ppm | | | | |

Appropriate Engineering Controls

Use local exhaust ventilation, if general ventilation is not adequate to control amount in the air. Provide eyewash and safety shower if contact or splash hazard exists.

Individual Protection Measures

Eye/Face Protection

Wear chemical safety goggles and face shield when contact is possible.

Skin Protection

Wear chemical protective clothing e.g. gloves, aprons, boots. Suitable materials are: Chemical Resistant Gloves: butyl rubber, neoprene rubber, nitrile rubber, Viton®/butyl rubber, Barrier® (PE/PA/PE).

Respiratory Protection

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Wear a NIOSH approved air-purifying respirator with N100, R100, or P100 filter(s). And wear a NIOSH approved air-purifying respirator with an organic vapour cartridge. Either full-face piece or half-face piece with splash goggles.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Basic Physical and Chemical Properties

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|---|--|
| Appearance | Dark brown viscous liquid. Absorbs moisture from the air. Particle Size: Not available |
| Odour | Aromatic |
| Odour Threshold | Not available |
| рН | 5.5 - 7.0 |
| Melting Point/Freezing Point | Not available (melting); Not available (freezing) |
| Initial Boiling Point/Range | Not available |
| Flash Point | Not available |
| Evaporation Rate | Not available |
| Flammability (solid, gas) | Not available |
| Upper/Lower Flammability or Explosive Limit | Not available (upper); Not available (lower) |
| Vapour Pressure | Not available |
| Vapour Density (air = 1) | Not available |
| Relative Density (water = 1) | 1.14 at 68 °F (20 °C) |
| Solubility | Not applicable in water; Moderately soluble in common organic solvents. |
| Partition Coefficient, n-Octanol/Water (Log Kow) | Not available |
| Auto-ignition Temperature | Not available |
| Decomposition Temperature | Not available |
| Viscosity | Not available (kinematic); 3200 - 6000 centipoises (dynamic) |
| Other Information | |
| Physical State | Liquid |
| Molecular Formula | Not applicable |
| Molecular Weight | Not available |
| Bulk Density | Not available |
| Surface Tension | Not available |
| Critical Temperature | Not available |
| Electrical Conductivity | Not available |
| Vapour Pressure at 50 deg C | Not available |
| Saturated Vapour Concentration | Not available |
| | |

SECTION 10. STABILITY AND REACTIVITY

Reactivity None known. Chemical Stability Normally stable. Possibility of Hazardous Reactions None expected under normal conditions of storage and use. Conditions to Avoid Water, moisture or humidity. Alkaline conditions (high pH).

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Incompatible Materials

Polymerizes on contact with: alkanolamines (e.g. triethanolamine), alcohols (e.g. ethanol), amines (e.g. triethylamine), glycols (e.g. ethylene glycol), water.

Not corrosive to metals.

Hazardous Decomposition Products

None known.

SECTION 11. TOXICOLOGICAL INFORMATION

Likely Routes of Exposure

Skin contact; eye contact; ingestion.

Acute Toxicity

| Chemical Name | LC50 | LD50 (oral) | LD50 (dermal) |
|-------------------------------------|--|--------------------|------------------------|
| Polymethylene polyphenyl isocyanate | 2 mg/L (rat) (aerosol) | > 2000 mg/kg (rat) | > 9400 mg/kg (rabbit) |
| Propylene carbonate | | 29100 mg/kg (rat) | > 26400 mg/kg (rabbit) |
| Toluene-2,4-diisocyanate | 0.1 mg/L (rat) (4-hour exposure) (vapour) | 6170 mg/kg (rat) | > 16000 mg/kg (rabbit) |

Oral ATEmix = 457677.8 mg/kg

Inhalation ATEmix = 20 mg/L (4-hour exposure) (vapour)

Skin Corrosion/Irritation

May cause mild irritation based on information for closely related chemicals.

Serious Eye Damage/Irritation

May cause serious eye irritation based on information for closely related materials.

STOT (Specific Target Organ Toxicity) - Single Exposure

Inhalation

May be harmful based on information for closely related materials.

Skin Absorption

May be harmful based on information for closely related materials.

Ingestion

Not harmful based on information for closely related materials.

Aspiration Hazard

No information was located.

STOT (Specific Target Organ Toxicity) - Repeated Exposure

May cause irritation of the respiratory system. May cause respiratory tract injury. (Toluene-2,4-diisocyanate)

Respiratory and/or Skin Sensitization

May cause an allergic reaction (skin sensitization) based on information for closely related chemicals. May cause severe asthma-like symptoms (respiratory sensitization) based on information for closely related chemicals. (Toluene-2,4-diisocyanate)

Carcinogenicity

| Chemical Name | IARC | ACGIH® | NTP | OSHA |
|-------------------------------------|----------|----------------|------------------------|------------|
| Polymethylene polyphenyl isocyanate | Group 3 | Not designated | Not Listed | Not Listed |
| Toluene-2,4-diisocyanate | Group 2B | | Reasonably anticipated | Not Listed |

Reproductive Toxicity

Development of Offspring

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| No information was located. |
|-------------------------------|
| Sexual Function and Fertility |
| No information was located. |
| Effects on or via Lactation |
| No information was located. |
| Germ Cell Mutagenicity |
| No information was located. |
| Interactive Effects |
| No information was located. |
| |

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

No information was located.

Acute Aquatic Toxicity

| Chemical Name | LC50 Fish | EC50 Crustacea | ErC50 Aquatic Plants | ErC50 Algae |
|-------------------------------------|-----------|----------------|-------------------------|-------------|
| Polymethylene polyphenyl isocyanate | | | | |

Persistence and Degradability

No information was located.

Bioaccumulative Potential

No information was located.

Mobility in Soil

No information was located.

Other Adverse Effects

There is no information available.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal Methods

Dispose of contents and container in accordance with local, regional, national and international regulations.

SECTION 14. TRANSPORT INFORMATION

Not regulated under Canadian TDG regulations. Not regulated under US DOT Regulations.

Environmental Not applicable Hazards Special Precautions Not applicable Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code Not applicable

SECTION 15. REGULATORY INFORMATION

Safety, Health and Environmental Regulations

Canada

Domestic Substances List (DSL) / Non-Domestic Substances List (NDSL)

All ingredients are listed on the DSL/NDSL.

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USA

Toxic Substances Control Act (TSCA) Section 8(b)

All ingredients are listed on the TSCA Inventory.

Additional USA Regulatory Lists

California Proposition 65: MARNING: This product can expose you to Toluene Diisocyanate, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

SECTION 16. OTHER INFORMATION

| NFPA Rating | Health - 1 | Flammability - 1 | Instability - 0 | |
|----------------------------|---|---|--|--|
| SDS Prepared By | Avanti International | | | |
| Date of Preparation | March 09, 2018 | | | |
| Date of Last Revision | May 07, 2018 | | | |
| Revision Indicators | Not applicable. | | | |
| Key to Abbreviations | ACGIH® = American Conference of Governmental Industrial Hygienists IARC = International Agency for Research on Cancer NFPA = National Fire Protection Association NIOSH = National Institute for Occupational Safety and Health OSHA = US Occupational Safety and Health Administration RTECS® = Registry of Toxic Effects of Chemical Substances NTP = National Toxicology Program | | | |
| References | HSDB® data Occupationa for Occupatio and Safety (Dassault Sys | abase. US National Lib I Health and Safety (C onal Safety and Health CCOHS). Registry of 1 | Centre for Occupational Health and Safety (CCOHS). brary of Medicine. Available from Canadian Centre for CCOHS). NIOSH Pocket Guide database. National Institute n. Available from Canadian Centre for Occupational Health Toxic Effects of Chemical Substances (RTECS®) database. /IA"). Available from Canadian Centre for Occupational | |