

AV-202® MULTIGROUT**SECTION 1. IDENTIFICATION**

Product Identifier	AV-202 MULTIGROUT
Other Means of Identification	Hydrophilic Grout
Other Identification	HYDROPHILIC POLYURETHANE FOAM
Recommended Use	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 the US Hazard Communication Standard (HCS 2012) and Canada's Hazardous Products Regulations (WHMIS 2015).

Classification

Acute toxicity (Inhalation) - Category 4; Skin irritation - Category 2; Respiratory sensitization - Category 1; Skin sensitization - Category 1; Carcinogenicity - Category 2; Specific target organ toxicity (single exposure) - Category 3; Specific target organ toxicity (repeated exposure) - Category 1

Label Elements

Signal Word:

Danger

Hazard Statement(s):

H332	Harmful if inhaled.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H351	Suspected of causing cancer.
H372	Causes damage to organs (respiratory system) through prolonged or repeated exposure if inhaled.

Precautionary Statement(s):

Prevention:

P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P264	Wash hands and skin thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P272	Contaminated work clothing must not be allowed out of the workplace.
P280	Wear protective gloves.

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P284 In case of inadequate ventilation wear respiratory protection (NIOSH approved air-purifying respirator with N100, R100, 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.

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

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

Disposal:

P501 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:

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.

Eye 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

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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.

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

Chemical Name	ACGIH TLV®		OSHA PEL		AIHA WEEL	
	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

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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

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

Appearance	Dark brown viscous liquid. Absorbs moisture from the air. Particle Size: Not available
Odour	Aromatic
Odour Threshold	Not available
pH	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.

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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).

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)	> 10000 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 = 45,076 mg/kg

Dermal ATEmix = 43,282 mg/kg

Inhalation ATEmix = 6.7 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

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Chemical Name	IARC	ACGIH®	NTP	OSHA
Polymethylene polyphenyl isocyanate	Group 3	Not designated	Not Listed	Not Listed
Toluene-2,4-diisocyanate	Group 2B	A3	Reasonably anticipated	Not Listed

Reproductive Toxicity

Development of Offspring

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		> 500 mg/L (Daphnia magna (water flea))	1640 mg/L (Desmodesmus subspicatus (algae); 72-hour; static)	

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 Hazards Not applicable

Special Precautions Not applicable

Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code

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Not applicable

SECTION 15. REGULATORY INFORMATION

Safety, Health and Environmental Regulations

USA

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

All ingredients are listed on the TSCA Inventory.

Additional USA Regulatory Lists

California Proposition 65: WARNING: 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.

Canada

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

All ingredients are listed on the DSL/NDSL.

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 June 06, 2019

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 CHEMINFO database. Canadian Centre for Occupational Health and Safety (CCOHS).
HSDB® database. US National Library of Medicine. Available from Canadian Centre for Occupational Health and Safety (CCOHS). NIOSH Pocket Guide database. National Institute for Occupational Safety and Health. Available from Canadian Centre for Occupational Health and Safety (CCOHS). Registry of Toxic Effects of Chemical Substances (RTECS®) database. Dassault Systèmes/BIOVIA ("BIOVIA"). Available from Canadian Centre for Occupational Health and Safety (CCOHS).

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